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THESIS

**AN EVALUATION OF TRANSFER PAYMENTS
WITHIN THE
MILITARY HEALTH SERVICES SYSTEM**

by

Alan L. Portis
June, 1996

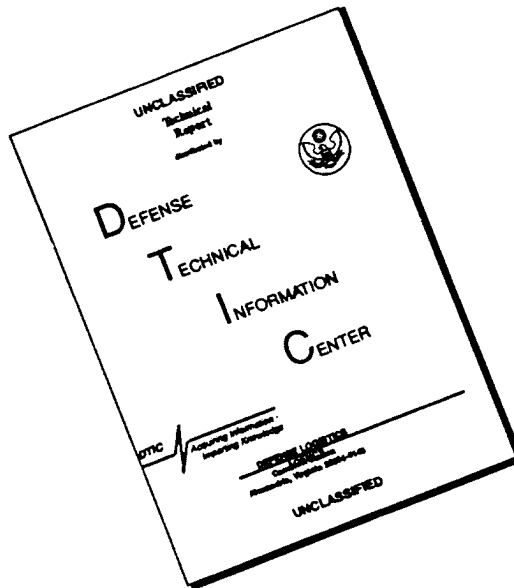
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**AN EVALUATION OF TRANSFER PAYMENTS
WITHIN THE
MILITARY HEALTH SERVICES SYSTEM**

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Lieutenant, Medical Service Corps, United States Navy
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Submitted in partial fulfillment
of the requirements for the degree of

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ABSTRACT

Under the Department of Defense's (DoD) modified capitation resource allocation system, there are incentives to shift costs to other components of the Military Health Services System (MHSS). In the transition to capitation budgeting, the Office of the Assistant Secretary of Defense for Health Affairs (OASD/HA) published the Transfer Payment policy in 1995 to ensure the equitable transfer of funds between the Services and Military Treatment Facilities (MTFs). This thesis begins by providing background on the MHSS direct care system, TRICARE Program, and DoD's modified capitation resource allocation methodology. Since the methodology of transfer payments is based on data from currently utilized information systems, this thesis contains a discussion of those systems as well as those planned for deployment. The relevant prospective payment system (PPS) costing factors used in determining a transfer price are also examined. Case studies are used to illustrate when a transfer payment would occur and what computations are employed in determining the amount of funds to transfer. Although the policy was designed to provide for an equitable transfer of funds, it has been the subject of much debate. Consequently, this thesis examines the major implementation issues and current effectiveness of the policy itself.

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LIST OF ACRONYMS

ADS	Ambulatory Data System
AIS	Automated Information System
AMC	Army Medical Center
ASA	Adjusted Standardized Amount
BRAC	Base Realignment and Closure
BUMED	Bureau of Medicine and Surgery
CABR	Catchment Area Billing Report
CAPS	CHAMPUS Actuarial Projection System
CAT	Category
CEIS	Corporate Executive Information System
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CHCS	Composite Health Care System
CMI	Case Mix Index
CONUS	Continental United States
CPT	Current Procedural Terminology
CRI	CHAMPUS Reform Initiative
DEERS	Defense Enrollment Eligibility Reporting System
DHP	Defense Health Program
DMIS	Defense Medical Information System
DOD	Department of Defense
DRG	Diagnosis Related Group
FT	Fort
FTE	Full Time Equivalent
FY	Fiscal Year
GAO	Government Accounting Office
GME	General Medical Education
HCFA	Health Care Financing Administration
HLOS	High Length of Stay
HMO	Health Maintenance Organization
HSR	Health Service Region
ICD	International Classification of Diseases
IME	Indirect Medical Education

LOS	Length of Stay
LLOS	Low Length of Stay
MCS	Managed Care Support
MCSC	Managed Care Support Contract
MCTR	Medical Center
MDC	Major Diagnostic Group
MEDCEN	Medical Center
MEDCOM	Medical Command
MED CTR	Medical Center
MED GRP	Medical Group
MED SQUAD	Medical Squadron
MEPRS EAS III	Medical Expense Performance and Reporting Systems - Expenses Assignment System III
MHSS	Military Health Services System
MLOS	Mean Length of Stay
MSA	Metropolitan Statistical Areas
MTF	Military Treatment Facility
NAS	Nonavailability Statement
NAVCARE	Naval Primary Care Contracted Clinics
NH	Naval Hospital
NNMC	National Naval Medical Center
NPS	Naval Postgraduate School
OASD/HA	Office of the Assistant Secretary for Defense (Health Affairs)
OCHAMPUS	Office of the Civilian Health and Medical Program of the Uniformed Services
O&M	Operations and Maintenance
OPAE	Office of Program Analysis and Evaluation
PCM	Primary Care Manager
POS	Point-of-Service
POM	Program Objective Memorandum
PPO	Preferred Provider Organization
PPS	Prospective Payment System
PRIMUS	Primary Care (Clinic) for the Uniformed Services
RAPS	Resource Analysis and Planning System
RCMAS	Retrospective Case Mix Analysis System
RWP	Relative Weighted Product
STS	Specialized Treatment Services

TSO

TRICARE Support Office

USA

United States Army

USAF

United States Air Force

USAMEDCOM

United States Army Medical Command

USN

United States Navy

UM

Utilization Management

I. INTRODUCTION

A. GENERAL

This thesis will evaluate the Transfer Payment policy developed by the Office of the Assistant Secretary of Defense for Health Affairs (OASD/HA) and Military Medical Departments. Understanding the transfer payment process requires an examination of the TRICARE program structure; the modified capitation-based resource allocation methodology employed by Health Affairs; and the information systems, data and specific calculations used in the determination of transfer payment prices. Discussions will also include the incentives created by the transfer payment policy.

B. BACKGROUND

The Military Health Services System (MHSS) is one of the nation's largest health care systems, offering health care benefits to about 8.3 million people and costing over \$15 billion annually. The primary mission of the MHSS is to maintain readiness by providing for the health care of approximately 1.7 million active-duty service personnel and by being prepared to deliver health care during times of war. However, of the 8.3 million people that receive health care through the MHSS, 29 percent is comprised of active duty family members and 50 percent represents military retirees and their families. The number of eligible beneficiaries is expected to decline only slightly through the year 2000, even though the active-duty forces are being reduced because the number of retiree families will increase. [Ref. 1]

The MHSS provides health care services through an extensive worldwide system of military medical facilities consisting of 127 military hospitals and medical centers and 504 clinics. [Ref. 1] Inpatient referrals throughout the MHSS represent approximately \$450 million of the Defense Health Program (DHP) [Ref. 2].

The goal of the Military Health Services System is to deliver value by giving active duty members, retirees and their families access to high quality, efficient health care. As the nation's largest employer, the military is facing unprecedented challenges in managing reduced resources to pay for steadily rising health care costs similar to those confronting the civilian health care community.

Some of the reasons for increasing health care costs include: high-priced medical technology; proliferation in facilities and services; increased labor costs; changes in medical practice and standards; and increased utilization and normal inflation. An important part of the solution to these problems is through a revamped health care system where the incentives motivate everyone to pursue or provide cost-effective health care. [Ref. 3]

With the impetus for national health care reform in 1993, the Department of Defense (DoD) began aggressively implementing its health care reform program, known as TRICARE, with scheduled nation-wide implementation by mid-1997. In concert with the implementation of the TRICARE program, a capitation-based methodology was used in Fiscal Year (FY) 1994 to resource the Military Departments and ultimately, the individual MTFs.

Historically, under a workload-based financing scenario, MTFs were retrospectively reimbursed for services provided to patients. In other words, hospitals were rewarded for the amount of workload produced, not on how efficiently that workload was processed. This method of reimbursement is known as "fee-for-service". As the quantity of care delivered and level of resources used continued to climb, so did the medical facility's budget. This methodology of financing created a great disincentive for the efficient use of resources.

Recently, defense cutbacks and downsizing have reduced funding for health care as well as other activities. To instill economic behavior in the use of increasingly limited resources, the Office of the Assistant Secretary of Defense for Health Affairs (OASD/HA), hereafter referred to as Health Affairs, looked to a population-based financial resource allocation methodology, or capitation budgeting. As demonstrated by the popularity and success of private-sector Health Maintenance Organizations (HMOs), capitation provides economic incentives to cost-effective and efficient managed care because it discourages inappropriate hospital admissions, excessive lengths of stay and unnecessary services. Under capitation, the military MTF commander assumes responsibility for providing all health services to a defined population in return for an annual fixed amount per beneficiary regardless of the type and quantity of services used. Thus, the financial incentive has shifted from the emphasis on workload to the efficient delivery of necessary health care to the beneficiary population. [Ref 2]

Unlike HMOs, who base their capitated rate on an enrolled, and thus well-defined, population of beneficiaries, the Military Health Services System is tasked with providing care to a population which is not enrolled in their health care system and is inherently mobile. Thus, to assist military MTFs in defining their serviceable population, "catchment areas" were assigned. The catchment area for an individual MTF is defined as a 40 mile radius around the facility. However, as previously alluded to, the user population of a specific military medical facility does not necessarily come from its designated catchment area. Military beneficiaries are not enrolled as in a civilian managed care plan and are able to go to any military medical facility for treatment. In turn, these facilities can refer patients to other military hospitals for care. [Ref. 2]

MTF funding and workload historically included patients from non-catchment areas and other MTF catchment areas (referrals). Consequently, the Military Departments were given resources in their capitated allocation for that workload. Because the cost of care for these beneficiaries is included in the medical capitated allocation, hospital commanders continue to receive funds to care for these beneficiaries and continue to provide them appropriate care.

However, the problem stems from the new capitated financing system in that the resulting capitated rate for individual medical facilities was calculated on historical workload. MTFs are indeed funded for some historical level of referrals, but with the new financial incentives that accompany a capitation-based resource allocation system, subsequent shifts in workload between facilities may occur.

Workload in some MTFs may increase, while workload in other MTFs may decrease. Workload shifts, whether the result of clinical referral patterns, Base Realignment and Closure (BRAC) driven population changes, or managed care decisions may adversely affect the operating budgets of referral centers and result in "windfall profits" to referring facilities. [Ref. 2]

An effective method to provide for a transfer of funds between military MTFs is an integral part of building a competitive health services system using a business case approach. On May 22, 1995, Health Affairs issued a transfer payment policy to prevent possible adverse effects on the operating budgets of referring and referral activities once capitated budgeting was fully implemented. In its policy paper, Health Affairs has termed transfer payments a major component of the MHSS capitation-based resource allocation. Presently, the transfer payment policy issued by Health Affairs applies only to inpatient referrals due to the lack of required outpatient data and inadequate information systems. Still, inpatient referrals throughout the MHSS represent approximately \$450 million of the Defense Health Program (DHP). The transfer payment policy, in essence, was designed as a mechanism to allow for an equitable movement (i.e., transfer) of funds from an MTF to other MTFs where the care was actually provided. [Ref. 2]

The lack of adequate and timely information on health care has, over the years, impeded several DoD initiatives to provide health care more cost effectively. Inadequate information systems continue to hamper the effectiveness of MTF commanders and their ability in implementing change. These concerns about DoD

health care management information systems become even more critical with the implementation of TRICARE and a capitation-based resource allocation system.

C. RESEARCH QUESTIONS

The primary question that this thesis endeavors to answer is: What is the transfer payment policy and what will be the effect upon MTF referral policy and resources? In addition to answering the primary question, four subsidiary research questions will be addressed:

- What concerns necessitated the need for a transfer payment policy?
- What information systems and data were utilized in determining the transfer payment price?
- How and when is the transfer payment price determined?
- What are the primary implementation issues of the individual Services, Lead Agents, and MTFs?

D. SCOPE

This thesis will consist of an examination of the transfer payment policy as currently employed by Health Affairs and the Military Departments to include: relevant historical and background information; the information systems, data and specific calculations used in determination of transfer payment prices; the impact on Military Treatment Facilities (MTFs) decisions as they relate to referral policy and resources; individual Service and Lead Agent perspectives; and alternative approaches.

E. LIMITATIONS

Because of the recent introduction of this concept, this thesis is limited to current experiences. Due to time constraints, this thesis will terminate data collection on 1 June 1996.

F. LITERATURE REVIEW AND METHODOLOGY

Publications, instructions, and working papers from DoD, Health Affairs, and various Military Medical Departments were reviewed for areas relating to transfer payments, capitation based resourcing and the TRICARE program. This provided background data on practices and policies.

Key personnel from Health Affairs and the individual Services were interviewed to gain additional insight and perspectives into the current transfer payment policy.

G. DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

Definitions of certain terms presented in the thesis are given as they arise. A list of abbreviations and acronyms is presented after the Table of Contents.

H. CHAPTER OUTLINE

Following the introduction chapter, which provided a general introduction to the concept and current policy on transfer payments, this thesis is organized into five chapters.

Chapter II will provide an overview of the MHSS direct care system, the TRICARE program, the DoD modified capitation-based resource allocation system, and the information systems utilized and under development in support of DoD

capitation. More specifically, this chapter will also discuss the decision making process and organizational structure of the MHSS direct care system and TRICARE program.

Chapter III provides an overview of those transfer payment factors used in computing the actual transfer payment. Specifically, this chapter will provide a discussion on diagnosis related groups (DRGs), length of stay (LOS), relative weighted products (RWPs), case-mix index (CMI), and adjusted standardized amounts (ASAs).

Chapter IV will examine through case studies when a transfer payment is required and how the transfer payment is calculated. The transfer payment formulas will be presented with accompanying explanations and examples.

Chapter V will present the transfer payment policy implementation issues that currently concern the Services and lead agents. This chapter is not meant to provide a critical review of the policy, but rather consolidates those issues that may impact upon the successful implementation of the transfer payment policy. Various examples will be provided as needed.

Chapter VI will conclude this thesis with a summary, conclusions and recommendations, and directions for future research.

II. BACKGROUND

A. THE MILITARY HEALTH SERVICES SYSTEM (MHSS)

As noted in Chapter I, the MHSS offers health care benefits to about 8.3 million people and costing over \$15 billion annually. In 1995, the medical budget represented about 6 percent of the total defense budget. The primary mission of the MHSS is to maintain readiness by providing for the health care of approximately 1.7 million active-duty service personnel and to be prepared to deliver health care during times of war. The MHSS also provides services to some 6.6 million nonactive-duty beneficiaries. Health care services are delivered through an extensive system of military treatment facilities (MTFs) located throughout the world and through an insurance-like program called the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). [Ref 1]

The Assistant Secretary of Defense (Health Affairs) is responsible for planning, policy development, and oversight of the MHSS. These responsibilities include developing guidance on DoD health plans and programs; ensuring that medical programs and systems meet operational readiness requirements; establishing requirements and standards for DoD medical and acquisition programs; programming and budgeting MHSS resources and funds, except for personnel and construction funds; and administering CHAMPUS.

Each Service, in turn, has its own medical department (The Navy's Bureau of Medicine and Surgery (BUMED); the U.S. Army Medical Command

(USAMEDCOM); and the U.S. Air Force Medical Department) each headed by its own surgeon general. Each of the Services' medical departments prepares a medical program budget for Health Affairs, develops Service-specific programs, and operates the Services' MTFs. Each Service also recruits and funds its own medical personnel to administer the medical programs and provide health care services.

Funding for the MHSS is provided through a single defense medical appropriations account, the Defense Health Program (DHP) Appropriation. The DHP provides the necessary resources for the delivery of medical and dental services to the active forces and other eligible beneficiaries. It provides funds for operation and maintenance, procurement, research and development, medical command headquarters, specialized services for the training of medical personnel, occupational and industrial health care, and CHAMPUS. The DHP also provides funding for the acquisition of expensive capital equipment in support of military MTFs, training, facilities, and programs, but does not include funds for military construction (funded through a separate account) and active and reserve medical personnel. Active duty medical pay is included in the DHP Program Objective Memorandum (POM), but is transferred to the Military Departments for budget execution. [Ref. 4]

Health Affairs directs the distribution of funds to the Services, which then allocate the funds to their MTFs and other activities. Figure 1 depicts the flow of funds from the DHP to Health Affairs, the Services' Medical Departments, and ultimately to the individual MTFs and other medical activities.

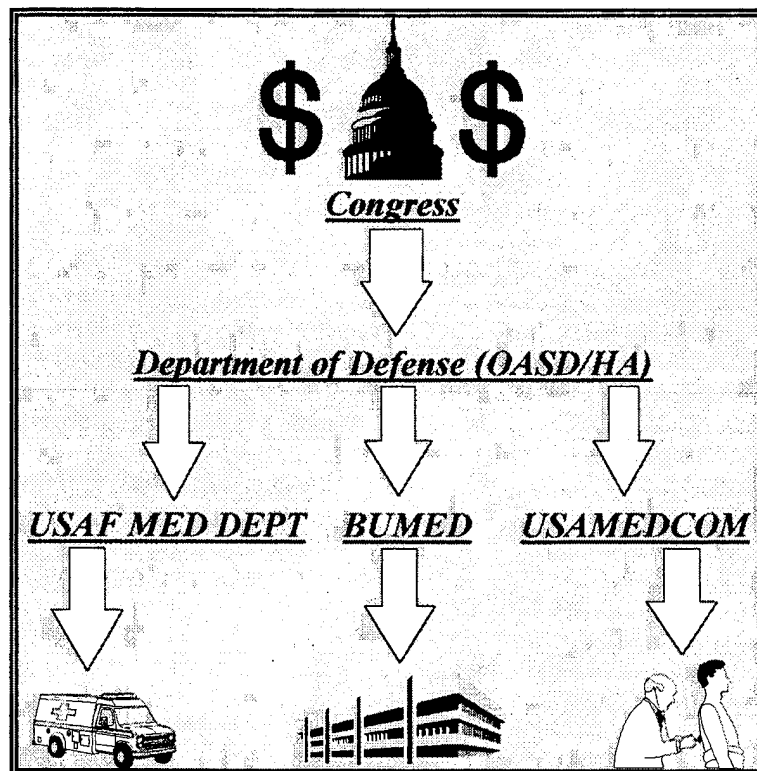


Figure 1. Depicts flow of funds from DHP

1. The Direct Care System

Active duty personnel and other eligible beneficiaries receive their health care services directly through an extensive system of DoD operated hospitals and clinics, staffed by civilian and military medical personnel. This delivery system has become known as the direct care system. Three-fourths of all health care services are provided through the direct care system while one-fourth is provided through CHAMPUS. Active-duty personnel and their family members make up about one-half of the eligible beneficiary population. The other half consists of retirees, their family members, and survivors.

The combined MTF capabilities of all three Services include over 600 MTFs and is composed of 127 military hospitals and 504 clinics. The MTFs employ about 48,000 civilians, as well as 135,000 active duty military, and about 91,000 personnel in the Selected Reserves and National Guard are assigned to medical missions.

There are three categories of MTFs: (1) Medical Centers, which are large tertiary care facilities, ranging in size from about 200 to 1,000 beds, offering both inpatient and outpatient care; (2) Community hospitals, typically with fewer than 200 beds, also offer inpatient and outpatient care but usually handle less complex cases than the medical centers; (3) Clinics, which are generally small facilities offering a limited range of primary care services and usually only on an outpatient basis (although some can do so in emergencies). Cases requiring more extensive treatment are referred to other military or civilian facilities. [Ref. 5]

Although fewer in number, the medical centers provide a larger portion of direct care. In 1992, about 57 percent of the inpatient workload and about one-third of the outpatient workload in the direct care system were handled in medical centers. Community hospitals handled about 43 percent of the direct care inpatient workload and about 60 percent of the outpatient workload. The remaining outpatient care was delivered in clinics. In FY94, MTFs admitted 704,232 patients, delivered 67,223 babies and had 46,189,193 outpatient visits. [Ref. 1]

2. The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS)

Since 1956, DoD has been authorized to treat nonactive-duty people within the MHSS. Legislative actions in 1956 and 1966¹ gave family members of active-duty personnel, retirees and their family members, and survivors access to care in MTFs on a space available basis. When health care services are not available in MTFs to nonactive-duty beneficiaries, these beneficiaries can receive health care from the private-sector through CHAMPUS. CHAMPUS is a program of medical benefits provided by the U.S. Government under public law. Active duty members are not eligible, but receive health care services through the direct care system.

Under CHAMPUS, DoD pays a portion of the cost of care. CHAMPUS is automatically available to the families of active-duty personnel, retirees and their family members, and survivors under the age of 65. At age 65, beneficiaries are no longer eligible for CHAMPUS because they become eligible for Medicare. However, Medicare eligible beneficiaries may still receive care through the direct care system on a space-available basis.

CHAMPUS is comparable to private-sector indemnity (fee-for-service) health benefit plans, requiring beneficiaries to pay for care up to an annual deductible amount, and then pay a portion of the remaining costs; however beneficiaries are not required to pay premiums for CHAMPUS. The amount of the deductible and copayment varies by type and source of health care and by different beneficiary

¹Dependents' Medical Care Act (P.L. 84-569), in 1956, and the Military Medical Benefits Amendments of 1966 (P.L. 89-614)

groups, ranging from \$50 to \$300 for the deductible and 20 to 25 percent for copayments. CHAMPUS eligibility, benefits and cost sharing are defined in Chapter 55 of Title 10, United States Code.

To help ensure fuller utilization of the direct care system, CHAMPUS will not pay for private-sector inpatient hospital care and some high cost outpatient care provided to beneficiaries living within a 40-mile radius of an MTF unless those beneficiaries receive prior approval from the facility. This approval is called a "nonavailability statement" and it tells the beneficiary that the MTF could not provide the necessary treatment within the required time frame or did not have the capability to provide the needed health care service. Beneficiaries living outside the 40-mile radius of the MTF are not required to obtain a nonavailability statement.

More than a third of the almost 6 million persons who are eligible for CHAMPUS use its benefits annually at a government cost of nearly \$3 billion. In FY93, CHAMPUS expenditures were approximately \$3.5 billion, nearly as much as was spent on nonactive duty beneficiaries in the direct care system (\$3.9 billion).

In 1987, in an effort to control spiraling health care costs, CHAMPUS implemented a new payment system for acute hospital services. It was based on a model established by the Health Care Financing Administration (HCFA) for the Medicare Prospective Payment System. CHAMPUS modified the model by utilizing CHAMPUS claim data to develop weights and rates specific to its beneficiary population. A GAO review in 1990 found that over \$200 million in savings in 1989 could be directly attributed to the new CHAMPUS payment approach.

In the case of payments to physicians and other individual providers, Congress directed in the DoD Appropriations Acts for 1991 through 1995, that CHAMPUS payment limits be analyzed to identify overpriced procedures, compared to Medicare, and that annual reductions of up to 15 percent in overpriced payment limits be made. In May 1992, CHAMPUS began paying physicians based on national prevailing charges, adjusted to reflect local economic conditions using Medicare's Geographic Practice Cost Indices. Today, CHAMPUS payment levels for many procedures are at or near Medicare Fee Schedule amounts. In order to protect beneficiaries and avoid impairing access to care, the payment level reductions can be waived if they would impair access. To provide financial protection for beneficiaries, CHAMPUS limits balance billing by nonparticipating providers to 115 percent of the allowable charge, the same as Medicare. [Ref. 4]

Within recent memory, several alternatives to the direct care system and CHAMPUS have been implemented. The more familiar programs include: the CHAMPUS Reform Initiative (CRI) demonstrations; Base Realignment and Closure (BRAC) site managed care initiatives; Tidewater Virginia (coordinated care) demonstration project; PRIMUS/NAVCARE Clinics; and the Managed Care Support Program Contract for California and Hawaii. [Ref. 6]

The rise of these health care reform initiatives can be attributed to ever increasing health care costs and the problems inherent in the MHSS itself. Historically, these problems have included [Ref. 6]:

- Uneven access to care.
- Overcrowding in the MTFs.
- Maldistribution of health care resources.
- Duplication of effort among the military medical services.
- Lack of a standardized health benefits package.
- Decreased DoD funding levels.
- Beneficiary confusion concerning available health care options.

Armed with the lessons learned from its previous health care initiatives and faced with ever increasing health care costs and reduced funding, the DoD has begun the monumental task of redesigning the MHSS through the implementation of TRICARE.

B. THE TRICARE PROGRAM

Congress in the National Defense Authorization Act for FY94, directed DoD to prescribe and implement a health benefit option for beneficiaries eligible for health care under Chapter 55 of Title 10, United States Code. Specifically, the program was to be modeled on Health Maintenance Organization (HMO) type plans offered in the private sector. Additionally, beneficiaries who enroll in the health benefit option, would have reduced out-of-pocket costs and a uniform benefit structure. Congress further directed that the costs would be no greater than those incurred to provide health care to the covered beneficiaries who enroll in the option.

With the advent of TRICARE, DoD found it necessary to "redesign" the current health care delivery system. In its redesign toward an HMO-like plan, DoD

incorporated several new features into the MHSS. These new features include a "Triple Option" for CHAMPUS eligible beneficiaries; establishment of 12 Health Service Regions (HSRs) within the United States; fixed price at-risk TRICARE Support Contracts within each HSR; and a capitation-based resourcing allocation system, to be discussed later in this chapter.

As previously mentioned at the beginning of this chapter, this discussion will primarily focus on the administrative and funding aspects of TRICARE, however a discussion of TRICARE would not be complete without a brief overview of the "Triple Option" offered to its beneficiaries.

1. The "Triple Option"

TRICARE offers beneficiaries eligible for CHAMPUS three health care delivery options. TRICARE Prime, which is similar to an (HMO) model; TRICARE Extra, a Preferred Provider Organization (PPO) type option; and TRICARE Standard, which is the basic CHAMPUS program.

TRICARE Prime is available to all CHAMPUS eligible beneficiaries. Beneficiaries are enrolled in an HMO-like plan and obtain health care services through an integrated network of civilian and military providers. Enrolled members of the TRICARE Prime Option will pay an annual enrollment fee and reduced CHAMPUS cost shares and copayments (point-of-service charges). Active duty members are automatically enrolled in TRICARE Prime and there are no annual fees for active duty members and their families. TRICARE Prime enrollees will also have access to a Primary Care Manager (PCM). The PCM is responsible for

coordinating patient referrals for health care within the integrated civilian and military provider network. Additionally, enrollees will usually have no claim forms to file. A point-of-service (POS) option is available under TRICARE Prime that allows enrollees to go outside the established network. However, this decision could involve payment of significant cost-shares and deductibles which could exceed basic CHAMPUS costs.

TRICARE Extra is a preferred provider network which reduces the cost share requirement more than the basic CHAMPUS program. Participants in this program will not be enrolled and will obtain their care from providers through an established civilian network, which has contracted with the government at a discounted rate. Users of the basic CHAMPUS program do not have to enroll in TRICARE Extra and may participate on a case-by-case basis. Also, beneficiaries have the added benefit of not having to file their claims.

TRICARE Standard is the basic CHAMPUS program. Beneficiaries are not required to be enrolled and have a greater choice in selecting their particular provider. However, this option requires the payment of annual deductibles and more costly copayments and cost-shares.

2. Regionally Managed Care

To implement and administer TRICARE, DoD has organized its medical facilities into new health care regions and established a new administrative structure to oversee the delivery of health care within the regions. MTFs are organized on a geographic basis into 12 HSRs, encompassing the MTFs from all

three Services. The number and Service affiliation of the facilities vary among HSRs, as well as the number of eligible beneficiaries in each HSR. A medical center commander within each HSR has been designated as the region's "Lead Agent" and is supported by a joint-Service staff.

3. Lead Agents

Lead Agents are a critical component of the DoD health care program. Lead Agents working cooperatively with all the Services' regional MTF commanders and their staffs will be directly responsible for the development, implementation, and management of the regional health plan for their MHSS beneficiaries, including the development of an integrated health care network within their respective regions. A Managed Care Support Contract, centrally procured by the TRICARE Support Office (formerly OCHAMPUS), will provide the civilian provider network that will augment MTF capabilities.

MTFs within each HSR retain their parent Services chain-of-command. Consequently, each Service will retain their authority to make decisions regarding direct care (MTF) operating funds, facility maintenance, and personnel actions. Therefore, the lead agent does not control the funds that flow from the Services to their respective facilities within the HSR or the CHAMPUS funds, which are controlled by DoD and the contractor. Lead Agents, in effect, are coordinators who attempt to ensure that MTFs in their region seek the most economical and efficient care possible.

Since the Lead Agent does not necessarily have the same Service affiliation as the MTFs in the region, the specific responsibilities of Lead Agents can vary among regions. However, the general purpose of the HSR concept is basically the same for all regions. Some general responsibilities of Lead Agents [Ref. 6] are listed below:

- Developing, in coordination with other regional commanders, the regional health services plan.
- Developing a plan for delivery of care and services which ensures continual improvement in pursuit of the goals of coordinated care.
- Developing regional policy for and coordinating patient referrals and non-availability statements.
- Developing regional contract requirements for the Health Services Region.
- Coordinating development of regional capitalization, maintenance and repair/renovation plans.
- Conducting ongoing evaluations of resource utilization and access throughout the Health Services Region.

Ultimately, the success of the TRICARE program will be dependent on the Services' willingness and ability to work together to ensure the efficient and effective execution of the regional health plan.

Table 1 on the following page presents information on the 12 HSRs, to include the designated lead agents for each HSR, the states included in the HSR, the estimated number of beneficiaries, and the number of military medical centers and hospitals located within each HSR.

<i>Region</i>	<i>Lead Agent</i>	<i>States in region</i>	<i>Beneficiary Population</i>	<i>Hospitals & medical ctrs</i>
1	National Capital (Bethesda, Walter Reed, Malcolm Grow Medical Centers)	CT, DE, D.C., ME, MD, MA, NH, NJ, NY, PA, RI, VT, Northern VA	1,093,918	12
2	Portsmouth Naval Hospital	NC, Southern VA	872,011	8
3	Eisenhower Army Medical Center	GA, SC, parts of FL	1,063,770	12
4	Keesler Air Force Medical Center	AL, TN, parts of FL and LA	595,024	10
5	Wright-Patterson Air Force Medical Center	IL, IN, KY, MI, OH, WV, WI	653,328	5
6	Wilford Hall Air Force Medical Center	AR, OK, parts of LA and TX	949,778	14
7	William Beaumont Army Medical Center	AZ, NV, NM, parts of TX	323,058	8
8	Fitzsimons Army Medical Center	CO, IA, KS, MN, MO, MT, NE, ND, SD, UT, WY, parts of ID	732,821	14
9	San Diego Naval Hospital	Southern CA	710,461	7
10	David Grant Air Force Medical Center	Northern CA	328,590	5
11	Madigan Army Medical Center	OR, WA, parts of ID	350,439	4
12	Tripler Army Medical Center	HI	151,750	1
Total			7,878,948	100

Table 1. TRICARE Regional Breakdown. After [Ref. 1]

4. Managed Care Support Contracts (MCSC)

Another major component of the TRICARE program is a series of seven managed care support contracts that will supplement the capabilities of regional military health care delivery networks. These managed care support contracts are procured centrally by the TRICARE Support Office (TSO), within the Office of the Assistant Secretary of Defense (Health Affairs), not by the lead agents of each region. Lead agents provide input to the contract proposal for region-specific requirements. In some cases, a single contract will be awarded for multiple regions (i.e., single contracts will be awarded for HSRs 2 and 5, HSRs 3 and 4, HSRs 7 and 8, and HSRs 9, 10, and 12).

The contracts are bid on a competitive basis and considered fixed-price, at-risk contracts. However, only the administrative portion of the contract has a fixed price, while the health care price is subject to adjustments on the basis of risk-sharing provisions in which the contractor and the government share contractor losses and gains beyond a certain level. Price adjustments can be based on factors such as inflation, beneficiary population, and MTF usage. The risk-sharing and bid price adjustment features are intended to protect both the contractor and the government from the large risks associated with these complex contracts.

Specifically, the contractors will develop networks of civilian providers around the MTFs, facilitate locating providers for beneficiaries, perform utilization management functions, process claims, provide beneficiary support functions, and administrative support to the lead agent, MTF commanders, and staff.

The contracts themselves are for a 5-year period (1 year plus 4 option years), and DoD estimates that they will have a combined value of about \$17 billion.

5. Specialized Treatment Services (STSs)

CHAMPUS beneficiaries in need of certain highly specialized high-cost medical care will be referred to a designated national or regional military or civilian treatment facility -- a Specialized Treatment Services (STS) facility (catchment area is 200 mile radius). The specific types of care to be covered (e.g., cancer treatment, bone marrow transplants) and the sites at which specialized care must be obtained will be announced annually by Health Affairs. A medical facility may be designated as an STS based on its record of readiness, access, quality, and cost. Lead Agents may designate regional STSs as a component of their regional health plans. An MTF commander can withhold a non-availability statement (NAS) based on the availability of care at designated STS sites. [Ref. 6]

C. CAPITATION

As previously stated in Chapter I, DoD medical facilities were funded on the basis of historical workload, which rewarded high resource utilization with increased budgets. Simply stated, hospitals were rewarded with additional funds when they increased their workload. This creates an incentive to provide additional services without fully considering necessity of the service provided. With the shrinking of defense dollars and the rise of medical expenditures, DoD is now focused on capitation-based resource allocation.

With capitation, there is no financial incentive to inappropriately increase the number of services used or to provide more costly care, than is clinically appropriate. Under a true capitation model, the Commander would assume the responsibility (risk) for providing health care services to a defined population for a fixed amount per beneficiary. Figure 2 presents a basic equation for determining the capitated rate per beneficiary.

$$\frac{\text{\textit{Total Health Care Resources}}}{\text{\textit{User Beneficiary Population}}} = \text{\textit{Capitation Rate}}$$

Figure 2. Basic Capitation Equation

1. DoD Modified Capitation Model

In 1994, DoD adopted a modified capitation approach because funds for some functions are not provided on a per capita basis. DoD's capitated allocation is based on a two-step process. First, Health Affairs distributes DHP resources to the Services' Medical Departments using a capitation methodology that was developed in concert with Service representatives. Second, the Services' Medical Departments pass the distributed resources to their individual MTFs using their own Service-unique capitation methodologies. CHAMPUS funds are not provided to the medical facilities but are pooled together at the Service-level to fund the TRICARE managed support contracts in each region (Regions 1, 2, and 3 may be an

exception due to alternative financing). The discussion that follows will center upon the Health Affairs capitated model.

Health Affairs has established three components that determine a Service's share of DHP resources and for setting the capitated rate. This model is a population driven system that is designed to ensure funding directly for military functions dealing with medical readiness. The three components of this model are: Category I, Military Medical Support (not capitated); Category II, Military Medical Unique Capitation Rate; and Category III, Medical Capitated Cost.

a. Category I - Military Medical Support

Military Medical Support are those services that are not capitated as well as those services not directly related to the size of military force structure. The following activities fall under Category I: Armed Forces Institute of Pathology, overseas MTF and dental operations, Aeromedical Evacuation System, Military Entrance Processing Command, Environmental Restoration/Compliance, and Capital Expense Initial Outfitting. Resources distributed to the Services under Category I are based on historical cost with an adjustment for inflation.

b. Category II - Military Medical Unique Capitation Rate

Category II, Military Medical Unique Capitation Rate, reflects those costs associated with mission requirements which are Service unique. Activities which support a larger number of active duty military receive an additive value to the capitated rate since this category is actually based on the size of the Services'

military force structure. In other words, Category II resource allocations are determined by the number of active duty population served.

Category II is composed of two subcategories. Category IIA includes readiness planning, physiological training flights and labs, military funded emergency leave, readiness exercises and training, veterinary services, optical labs and dental care. Category IIB includes education and training.

c. *Category III - Medical Capitated Cost*

Category III is Medical Capitated Cost. This is similar to the rate seen in HMOs and managed care plans in the private sector. Included in Category III are stateside medical operations. Capitation in Category III is based on total beneficiary user population served. For the most part, Categories I and II do not apply to all MTFs.

Figure 3 presents the percentage of Defense Health Program resources by category for FY96.

d. *Defined Beneficiary Population*

For Health Affairs, the defined catchment area (40 mile radius around an MTF) population is determined by the number of estimated users vice eligible beneficiaries. DoD acknowledges that it does not know the number of actual users because it does not require beneficiaries to select and enroll in a single health care plan. Therefore, Health Affairs, through the Defense Health Resources Study Center (located at the Naval Postgraduate School in Monterey, CA) conducts a questionnaire survey of MHSS beneficiaries semi-annually to gather various

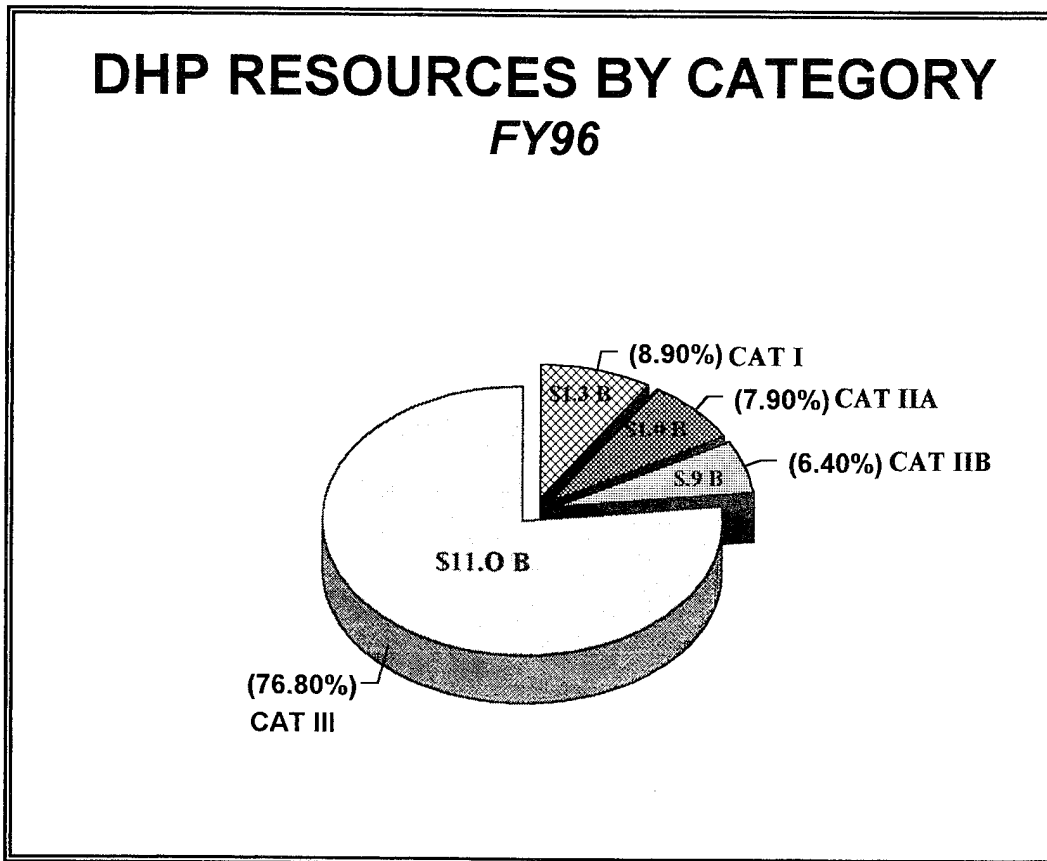


Figure 3. DHP Resources by Category. From [Ref. 7]

statistics on MHSS utilization. From this survey, Health Affairs can determine the estimated number of users by Service, HSR, and MTF. Thus, for computing the capitated rate, Health Affairs used an estimate of the number of actual users, based on full-time equivalent (FTE) users of direct care and CHAMPUS. The three Services, however, in formulating their "Service unique" capitation methodology, used eligible beneficiaries vice actual users to help their MTFs transition to a capitated system.

Without a universal enrollment system that would lock beneficiaries into a single plan, beneficiaries may move freely between DoD sources of care,

private insurers, or other programs such as Medicare and VA. The lack of a universal enrollment system to identify the population that uses the MHSS also makes it more difficult for lead agents and support contractors to create provider networks and plan the medical services necessary to meet the health care needs of the population using the MHSS. [Ref. 1]

D. INFORMATION SYSTEMS TO SUPPORT CAPITATION

The lack of adequate and timely information on health care has, over the years, impeded several DoD initiatives to provide health care more cost effectively. Existing cost accounting systems do not facilitate a true assessment and the question of whether military health care providers are more cost effective relative to those in the private sector becomes even more critical under capitation. MTF commanders must be able to accurately define their beneficiary populations and identify variations in the health care system in order to eliminate them. [Ref. 8] This section will provide an overview of those information systems currently in use and those planned for future deployment in support of capitation resource allocation.

1. Current Systems

a. *Defense Enrollment Eligibility Reporting System (DEERS)*

DEERS is a computer based enrollment/eligibility system used to verify entitlement to a variety of DoD services to include eligibility for health care services. Registration in DEERS is an MHSS requirement, regardless of the TRICARE benefit option chosen. Health care benefits eligibility in DEERS are

verified prior to the processing of any CHAMPUS and TRICARE claims. [Ref. 9]
DEERS registration, itself, is usually accomplished through local base Personnel Offices.

b. Composite Health Care System (CHCS)

CHCS is a comprehensive medical information system designed and developed to provide automated support to MTFs throughout the world. The system is composed of integrated modules that activated either together or independently, support high volume work areas within MTFs and enhance communications between support areas that will be critical under a capitated system. [Ref. 3]

CHCS comprises various modules that support a wide range of hospital functions, such as pharmacy, laboratory, patient administration, medical test results, and physician orders. A managed care program module has been designed specifically to support TRICARE. This module is designed to track the enrollment of beneficiaries in the Prime option, patient appointment bookings, and patient referrals -- functions needed at the outset of TRICARE implementation. CHCS has experienced some technical and implementation delays, but several sites are fully functional and DoD is continuing installation into MTFs nationwide. [Ref. 8]

c. Medical Expense Performance and Reporting Systems - Expenses Assignment System III (MEPRS EAS III)

MEPRS EAS III provides consistent and uniform reporting of expense, manpower, and workload data by fixed DoD medical and dental facilities at the local, Service, and OSD levels. MEPRS is the only system that links expenses, workload, and manpower data in a manner similar among the three Services.

[Ref. 3]

There are six major areas of care identified within MEPRS and each of these are assigned an alpha character to identify the functional account: Inpatient care (MEPRS A), Outpatient care (MEPRS B), Dental care (MEPRS C), Ancillary Services (MEPRS D), Support Services (MEPRS E), and Special Programs (MEPRS F).

Within each of the six major areas are the specialty accounts which are called work centers. These work centers perform the services and collect the MEPRS workload data. The MEPRS system tracks both workload and expense by work center.

Man-hours are reported in MEPRS by Full Time Equivalent (FTEs). One FTE represents one person working 168 hours per month. [Ref. 10]

MEPRS data are periodically forwarded by individual MTFs to a centralized location for data processing and the generation and distribution of various MEPRS reports.

MEPRS ensures that the MHSS as a whole utilizes uniform accounting principles, standardized terminology, uniform work performance indicators, common classification of expenses by work center, and a common cost assignment methodology. [Ref. 10]

d. *Defense Medical Information System (DMIS)*

DMIS provides a large repository of patient level population and financial data to support the formulation and execution of plans, programs and policies of the ASD(HA). It also supports the information needs of the Military Departments' headquarters staff and health care analysts. DMIS is a centralized non-deployed set of applications software and data bases that support the collection, integration, validation, distribution, and analysis of MHSS data concerning population, cost, utilization, and medical treatment data. DMIS data sources include information provided directly from the Services, MTFs, DEERS, MEPRS, TSO, and other sources. [Ref. 3]

e. *Retrospective Case Mix Analysis System (RCMAS)*

RCMAS is an application of DMIS and is a patient level, case-mix analysis system that provides MTFs, intermediate commands, the Surgeons General, and the OSD with timely access to clinical and management information. RCMAS uses direct care, CHAMPUS, population, and clinical data to provide statistics of observed versus expected workload and utilization trends. RCMAS adjusts for age, gender, and case mix when analyzing beneficiary categories by Diagnosis Related Groups (DRG). This adjustment process will be discussed in

more detail in Chapter III. Once the adjustments are made, the data can be used to make resource allocation decisions. RCMAS also provides a geographic mapping capability to display reports of population, nonavailability statements (NASs), and utilization. [Ref. 3]

f. Resource Analysis and Planning System (RAPS)

RAPS is also an on-line computer analysis tool of DMIS that can provide information on current and projected beneficiary populations (by active duty, retired, etc) through the use of DEERS data and various algorithms. RAPS also provides modeling and analytical tools to forecast military health care beneficiary population, workload, and costs. The model enables users to estimate and analyze the impact of alternative assumptions and policy decisions on resource requirements. Proper identification of the population base is essential for successful planning, programming, and execution in a capitated resource allocation system. [Ref. 11]

g. CHAMPUS Actuarial Projection System (CAPS)

CAPS is a mainframe-based forecasting model that provides CHAMPUS budget projections. CAPS makes separate forecasts of health care use and unit costs. These forecasts are combined to create monthly, quarterly, and fiscal year budget projections prospectively for five years. [Ref. 3]

2. New Systems

a. *The Ambulatory Data System (ADS)*

ADS provides ambulatory (i.e., outpatient) data as a by-product of the health care delivery process. Patient encounters are captured in sufficient detail to support basic clinical and administrative purposes, including analyses for managed care, epidemiological studies, billing, and severity/acuity case mix analyses. Patient diagnostic and treatment data are incorporated into a single record readily accessible by authorized users. Patient specific encounter data are based on national coding systems and can provide for cost of care evaluations.

ADS automates the manual accumulation, analysis, and formatting of workload reports based on Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) ambulatory care data. It expedites the collection of outpatient ambulatory data and provides the capability to produce workload and patient demographic reports. ADS will provide the patient-level workload data currently missing for the ambulatory area and so essential to a managed care system. As with all new information systems, it has faced implementation difficulties, but has accelerated its implementation schedule in 1996. [Ref. 12]

b. *Corporate Executive Information Systems (CEIS)*

CEIS will build upon and replace eight Legacy Systems (to include DMIS, RCMAS, RAPS). CEIS will provide executive decision support information across the entire MHSS using the data gathered from such sources as CHCS, DEERS, and CHAMPUS. It will provide standard reports to address managed care

concerns, such as; market assessment, health services utilization, financial analysis, and quality improvement. In addition to standard reports, CEIS will provide access to patient-level and aggregate data that can be accessed and reported directly by the users. Several sites are currently testing a "proto-type" of CEIS and full implementation is still several years away. [Ref. 13]

E. SUMMARY

This chapter provided background information on the MHSS, specifically the structure and composition of the direct care system, CHAMPUS, and the TRICARE program. It presented the methodology used in DoD's modified capitation allocation system and an overview of the information systems currently used to support it, as well as some of those planned for future deployment. Chapter III will provide the definitions and discussion of those factors used in computing a transfer payment.

III. FACTORS FOR COMPUTING TRANSFER PAYMENTS

A. GENERAL

Before the transfer payment methodology and calculations can be presented, it is necessary to understand some of the components used in determining a transfer payment. This chapter provides a discussion on diagnosis-related groups (DRGs), length of stay (LOS), relative weighted products (RWPs), case-mix index (CMI), and adjusted standardized amounts (ASAs).

1. Diagnosis Related Groups (DRG)

Medicare, from its inception in 1966 to 1983, made hospital payments based on a retrospective system that reimbursed hospitals for all reasonable costs. At the time, there was no real incentive to limit the amount or type of health care services rendered to patients. In effect, Medicare provided hospitals with blank checks that they could use to provide "gold-plated" services to Medicare beneficiaries. [Ref. 14]

On October 1, 1983, the apparent gross misuse and ever increasing Medicare costs prompted the federal government to implement a prospective payment system (PPS) for Part A (i.e., inpatient) Medicare reimbursement. The newly adopted PPS reimbursed hospitals a fixed amount (initially based on hospital costs at that time) for each admission based on the patient's diagnosis. If a hospital proved to be efficient in providing required health care services, than it could retain any excesses above the fixed reimbursable amount. Conversely, if the cost of care for a patient exceeded the fixed reimbursable amount, the hospital would record a loss. [Ref. 14]

The new PPS adopted by the Health Care Financing Administration (HCFA), the agency responsible for administering Medicare, was developed at Yale University by Fetter, Freeman and Thompson, called diagnosis- related groups (DRGs). This new DRG-based payment methodology was designed to provide incentives for cost containment which regulators believed would reduce length of stay. Consequently, the Office of the Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS) followed Medicare's lead and adopted the DRG system in 1987. The federal statute authorizing the CHAMPUS DRG-based system stipulated that it be "modeled" on the Medicare PPS, and that whenever practicable, follow the same rules. [Ref. 15]

As previously mentioned, DRGs were designed to allow for a single fixed (prospective) payment for each patient. This single payment includes the cost of routine inpatient care, specialty care, and ancillary services. The exact amount of the payment is based on the patient's DRG as assigned at discharge.

DRGs, themselves, are statistically significant medical groups that use similar amounts and types of resources and are related in medical nature. They are, in effect, a patient classification scheme that relates demographic, diagnostic, and therapeutic characteristics of inpatient lengths of stay and amount of resources consumed. It provides a framework for specifying hospital case-mix, and identifies classifications of illnesses and injuries for which payment is made. [Ref. 11]

Simply stated, DRG codes attempt to capture the intricacies of an admission through classification of the patient into a numeric category based on diagnosis.

The starting point in determining the amount of reimbursement (or cost of resources consumed) is the DRG itself. HCFA, when it adopted this system, divided potential patient diagnoses into 25 (as of 1996) major diagnostic categories (MDCs), which correspond to the major human organ systems. Within the 25 MDCs, there are over 500 DRGs [Ref 14]. Table 2 provides a list of Medicare's ten most frequently used DRGs in 1991.

DRG NAME	DRG NUMBER	MDC NUMBER	1991 RELATIVE WEIGHT	AVG LENGTH OF STAY (DAYS)
Heart Failure and Shock	127	5	1.0169	8.1
Angina pectoris	140	5	0.6387	7.8
Simple pneumonia, age > 17	89	4	1.2059	9.2
Specific cerebrovascular disorders	14	1	1.2260	11.2
Psychoses	430	19	0.9089	26.7
Esophagitis, age > 17	182	6	0.7417	6.4
Bronchitis and asthma with complications, age > 17	96	4	0.9734	7.3
Major joint and limb procedures	209	8	2.3437	12.1
Nutritional and metabolic disorders with complications, age > 17	296	10	0.9404	8.8
Cardiac arrhythmia with complications	138	5	0.8707	6.2

Table 2. Ten Most Frequently Used DRGs for Medicare Patients. From [Ref. 14]

The DRG relative weights represent the average amount of resources consumed in treating that particular diagnosis relative to the resources consumed in treating the average diagnosis. "Resources consumed" refers to the average hospital operating costs utilized in treating a particular DRG or group of DRGs.

For example, the costs associated with DRG 209, major joint and limb procedures, are over 2.3 times as much as the costs associated with the average diagnosis (which would have a DRG relative weight of 1.0). Conversely, DRG 140, angina pectoris, would consume only about 64 percent of the resources required for the average diagnosis. To account for changes in resource consumption, treatment patterns, and technology, the DRG relative weights are adjusted and published annually in the Federal Register. [Ref. 14]

2. Length of Stay (LOS) Trim Points

Another important factor when considering DRG relative weights and the amount of resources consumed is length of stay (LOS). Medicare and OCHAMPUS assign geometric mean lengths of stay and high and low lengths of stay trim points to each DRG. The geometric mean lengths of stay and the length of stay trim points are also published in the Federal Register annually.

The "geometric mean length of stay" represents the average amount of time that a patient is expected to spend in the hospital based on the assigned DRG. The "low length of stay trim" point is found by moving three standard deviations below the geometric mean length of stay of the DRG. The vast majority of low length of stay trim points have been found to equal one day. The "high length of stay trim point" is similarly found by moving three standard deviations above the geometric mean length of stay. Figure 4 presents a graphical representation of trim points.

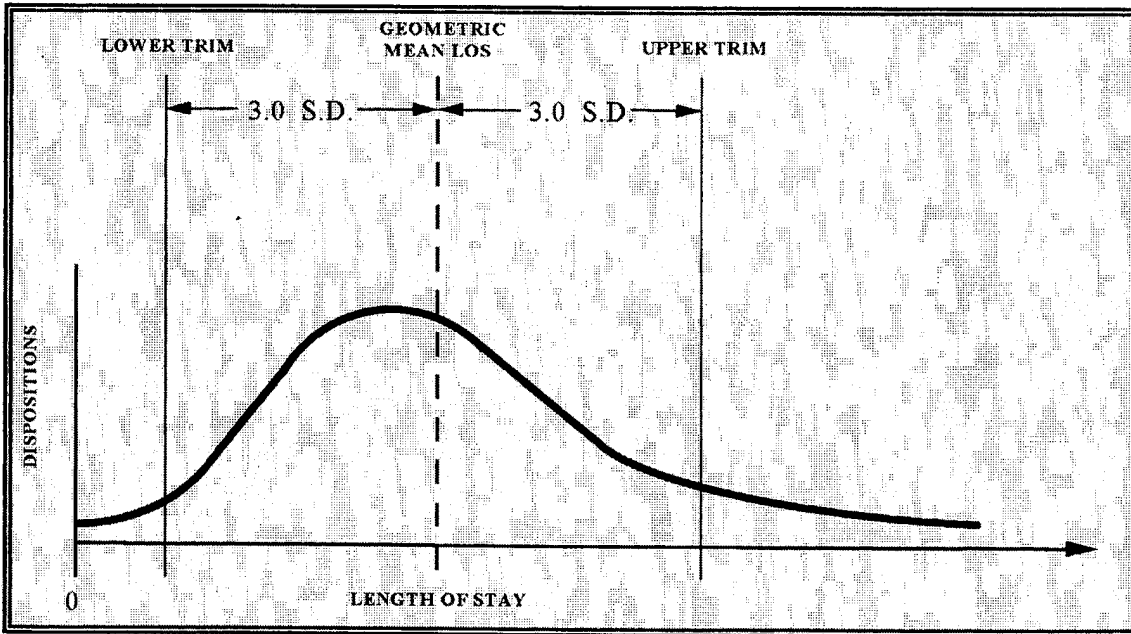


Figure 4. Trim Points. From [Ref. 11]

Lengths of stay that fall in between the high and low length of stay trim points (± 3 standard deviations) are considered “inliers”. Lengths of stay that fall below the low length of stay trim point are considered low length of stay outliers; lengths of stay that fall above the high length of stay trim point are considered high length of stay outliers. [Ref. 11]

3. Relative Weighted Product (RWP)

The “Central Retrospective Case-Mix Analysis System (RCMAS)” information system, as previously discussed in Chapter II, supports DoD’s health care resource analysis requirements. One of the functionalities of RCMAS includes the assignment of a relative weighted product (RWP) to each patient disposition based on the disposition’s DRG weight and length of stay trim points associated with the DRG. The RWP itself is a workload and resource allocation measure that

quantifies the relative resource consumption (operating costs utilized) of a disposition.

The amount of RWP (relative resources consumed) assigned to a particular disposition with an assigned DRG is calculated as follows: (1) An inlier patient disposition would be assigned an RWP amount equal to the DRG's relative weight; (2) A low length of stay outlier disposition would be assigned an RWP amount that is less than the DRG's relative weight, but equal to 200% of the per diem weight for each day, not to exceed the assigned DRG relative weight. Per diem weight is found by dividing the DRG's relative weight by the geometric mean length of stay; (3) A high length of stay outlier disposition would be assigned an RWP amount equal to the DRG's weight plus 60% of the per diem weight for each day that exceeds the high length of stay trim point.

Figure 5 presents a graphic view of the RWP calculations for short and long length of stay outliers and their relationship to the inlier length of stay, which equals the DRG relative weight.

To better illustrate RWP calculations and the resulting RWP amount assigned to a patient disposition, the following example is provided below. [Ref. 11]

Given the DRG, DRG relative weight, and LOS values originally assigned by TSO:

DRG 392	Splenectomy, age > 17
DRG weight	1.9746
Low length of stay trim point	2 days
High length of stay trim point	23 days
Geometric mean length of stay.....	7.6 days

- If the length of stay was between 2 and 23 days, this would be classified as an inlier disposition. An Inlier disposition for DRG 392 would receive an RWP value equal to the DRG weight of 1.9746. Therefore, RCMAS would automatically assign a RWP of 1.9746 to this disposition
- A low length of stay outlier would be any disposition for DRG 392 that had a length of stay less than 2 days. A low length of stay outlier of one day would be assigned a RWP amount equal to:

$$[(1.9746/7.6) \times 2.0] \times 1 = 0.5196 \text{ RWP}$$
- A high length of stay outlier of 27 days (four days over the high length of stay trim point) would be assigned a RWP amount equal to:

$$1.9746 + [((1.9746/7.6) \times 0.60) \times 4] = 2.5982 \text{ RWP}$$

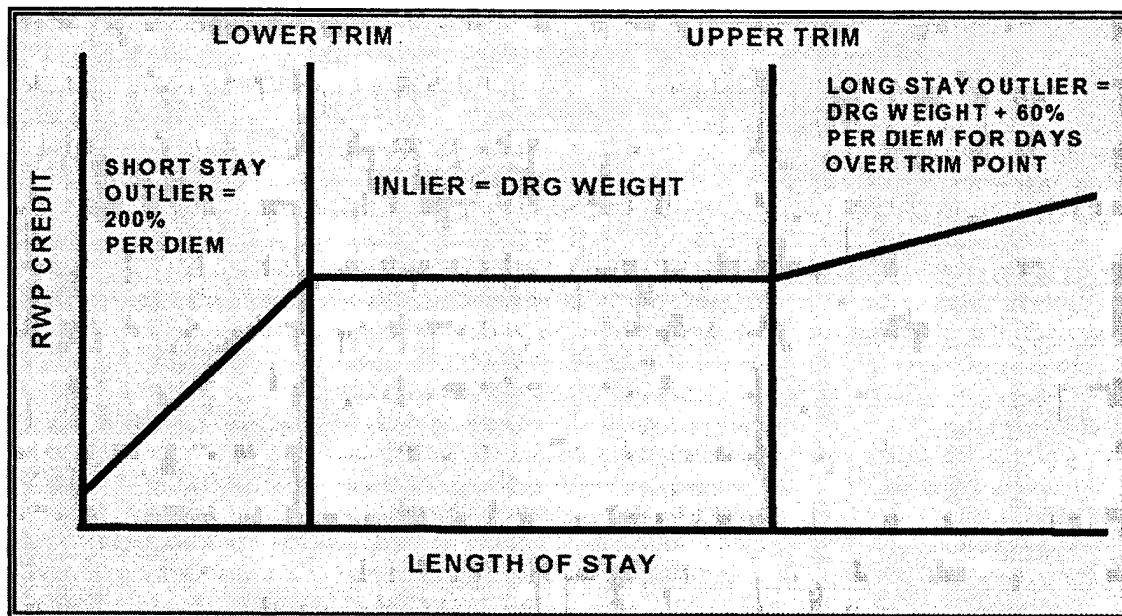


Figure 5. RWP Calculations. From [Ref. 11]

The above examples and calculations illustrate how RWPs are used as a measure of relative resource consumption. If a disposition falls within the high and low LOS trim points of a particular DRG, then the relative resources expended for that disposition is comparable to the average resources usually consumed for that

particular DRG. Therefore, the RWP assigned to the disposition is the DRG's relative weight. Similarly, low length of stay outlier dispositions utilize less resources and high length of stay outliers utilize more resources than the average for a particular DRG. Thus, the amount of the RWP assigned for a low length of stay outlier will always be less than the DRG's relative weight and the RWP assigned for a high length of stay outlier will always be greater than the DRG's relative weight.

4. Case-Mix Index (CMI)

The case-mix index (CMI) is a useful tool for judging the types of diagnoses (i.e., complexity) that are being treated at a particular hospital or MTF. The index represents the average DRG relative weight for all patients treated in a specific period. The average or expected CMI value for a given set of dispositions is 1.0. To illustrate the concept, the 1990 case-mix index for North Ridge Medical Center in Fort Lauderdale was 1.775, while that of De Soto Memorial Hospital in Arcadia, Florida, was 0.840. This example indicates that North Ridge Medical Center is treating much more complex cases requiring greater resources than is De Soto Memorial Hospital. [Ref. 14]

Using RCMAS, the accumulated RWPs are used to calculate the CMI. As previously stated (see Table 2), a relative weighted value of 1.0 indicates the expected or standard complexity (hence, the expected amount of resources consumed) for a given set of dispositions, while values less than 1.0 indicate that the caseload was less complex than expected. The CMI can be computed for an

entire MTF's dispositions or for an individual DRG's total dispositions. Conversely, values greater than 1.0 indicate that the caseload was more complex than expected. The CMI is computed by dividing the summed RWPs for all dispositions in an MTF by the number of dispositions. A CMI can also be calculated for a specific DRG or groups of DRGs. A CMI for a particular DRG is computed by dividing the aggregate RWPs for all dispositions for that DRG by the number of those dispositions. [Ref. 11]

5. Adjusted Standardized Amounts (ASA)

Although "adjusted standardized amount" (ASA) is a relatively new term on the direct care side of the MHSS, the concept is basically modeled after current Medicare and CHAMPUS procedures.

Hospitals are grouped into Metropolitan Statistical Areas (MSAs) and classified by the HCFA as falling into one of three locational categories: large urban, other urban, or rural. Forty-six urban areas across the country are classified as "large urban", while the smaller urban areas retain the "other urban" classification. Hospitals outside of urban areas are classified as "rural". Additionally, the HCFA developed and promulgated local area wage indices to account for area wage adjustments (i.e., labor costs).

This classification system allows the HCFA and TSO, in essence, to establish standardized rates for inpatient billing. Standardized labor and non-labor costs per discharge are published annually in the Federal Register by the HCFA based on locational classifications for nine census areas as well as a national average. Table 3 contains the national average amounts for 1991.

GROUP	LABOR	NON-LABOR
Large Urban	\$2,532	\$1,043
Other Urban	\$2,491	\$1,026
Rural	\$2,451	\$790

Table 3. HCFA National Average Standardized Costs per Discharged Patient by Locational Category. From [Ref. 14]

As an example, Table 4 illustrates a Medicare reimbursement computation for DRG 127 (heart failure and shock) for a Miami, Florida, hospital, which is classified as a large urban hospital. The national large urban labor amount for DRG-127, \$2,532, is first adjusted by the local area wage index (TSO uses Medicare's indices). This product, which is the labor amount adjusted for area wage rates, is then added to the national non-labor costs. The result is the adjusted standardized amount (ASA), \$3,631, which is the hospital's base rate that is applied to all diagnoses. Finally, the adjusted hospital rate is multiplied by the DRG relative weight to obtain the reimbursement amount. In our illustration, the DRG relative weight is 1.0169, which produces a DRG payment of \$3,692. [Ref. 14]

The final Medicare or CHAMPUS PPS payment may be further adjusted for various reasons such as indirect medical education (operating costs that arise because of medical education). Separate payments may also be calculated for direct medical education costs (salaries for interns, residents, teaching personnel, etc.) and capital-related costs (depreciation, interest, lease, and rental expenses).

Hospital location.....	Large Urban
Area wage index for Miami.....	1.0223
DRG.....	127
DRG relative weight.....	1.0169
Large urban labor amount	\$2,532
Multiplied by area wage index	X <u>1.0223</u>
Adjusted labor amount	\$2,588
Plus non-labor amount	+ <u>\$1,043</u>
Adjusted hospital rate	\$3,631
Multiplied by DRG relative weight	X <u>1.0169</u>
Hospital reimbursement	\$3,692

Table 4. Example of Medicare DRG Payment.
From [Ref. 14]

Note that Medicare reimburses capital-related expenses prospectively (fixed amount) while CHAMPUS reimburses those costs on a retrospective basis (actual costs). [Ref. 15]

The DoD (Health Affairs), using a methodology similar to the HCFA approach, recently developed ASA rates for the direct care portion of the MHSS. The ASA methodology would allow for a direct comparison in cost efficiency between MTFs; and between MTFs and private-sector facilities. ASAs themselves represent the adjusted average operating costs for treating all beneficiaries in the direct care system in all DRGs during a selected period of time [Ref. 16]. The following paragraphs describe the methodology used by Health Affairs in determining ASAs.

First, CONUS (continental U.S.) MTFs were grouped into three locational categories; Large Urban (27 MTFs) , Other Urban (55 MTFs), or Rural (23 MTFs).

Second, DoD aggregate cost data from the MEPRS-A account (inpatient) and MEPRS-F account (Special Programs) were utilized to determine the labor (military and civilian) and non-labor costs for the three locational categories. Additionally, adjustments were made for indirect and general medical education (GME, or direct medical education), inflation, and asset use (capital-related expenses). These resultant "full cost" ASAs include all expenses (labor and non-labor) associated with Category III activities under capitation budgeting. [Ref. 17] The ASA rate for the three locational groups in FY95 are shown in Table 5 below.

ASA GROUP	LABOR	NON-LABOR	ASA RATE
Large Urban	\$2,767	\$1,141	\$3,908
Other Urban	\$3,021	\$1,246	\$4,267
Rural	\$3,830	\$1,236	\$5,066

Table 5. Adjusted Standardized Amount (ASA) rate. From [Ref. 17]

The ASA rates, above, have been further applied in the determination of specific MTF ASA rates. MTF specific ASA rates were obtained by making further cost adjustments for the cost of local indirect medical education (IME) and area wage adjustments. Appendix A provides a list of individual MTF FY95 ASA rates [Ref. 2].

Thus, ASAs facilitate a uniform approach to DRG costing and inpatient billing and make the direct care portion of the MHSS more comparable to CHAMPUS and

Medicare (incidentally, the ASA rates could feasibly facilitate reimbursements from Medicare for those eligible patients who receive MHSS benefits).

B. SUMMARY

This chapter provided a discussion on some of the factors that are utilized in a prospective payment system (PPS) and on how these factors relate to relative resource consumption in the determination of a PPS payment. Specifically discussed were diagnosis related groups (DRG), length of stay (LOS), relative weighted products (RWPs), the case-mix index (CMI), and adjusted standardized amounts (ASAs).

Consider three cases of DRG 392, Splenectomy age>17, one disposition is below the mean length of stay (LOS), one is within the mean, and one is above. Table 6 provides a summary of each factor and their relationship to each other and Table 7 demonstrates how a reimbursement would be computed for a MTF and Medicare, respectively. It is important to note that under the transfer payment methodology, MTFs would use the base DRG relative weight to compute the number of RWPs, while Medicare would adjust the number of RWPs for outliers.

Chapter IV will discuss how these factors relate to the current transfer payment methodology and how they are utilized in determining the actual transfer payment amount.

FACTORS	DEFINITION	DRG392 RELATIVE WEIGHT	LOW LENGTH OF STAY TRIM POINT (LLOS)	MEAN LENGTH OF STAY (MLOS)	HIGH LENGTH OF STAY TRIM POINT (HLOS)	TOTAL RWPs
Diagnosis Related Group (DRG)	related diagnoses - DRG 392, Splenectomy age>17	Patient A 1.9746	Patient B 2 days	Patient C 7.6 days	23 days	
Relative Weighted Product (RWP) LLOS=200% per diem. MLOS=DRG wt. HLOS=DRG wt. + 60% per diem.	measures relative resources consumed by a disposition based on mean LOS, LLOS, and HLOS.	1.9746	Disposition #1 is one day under LLOS. .5196 RWP (see example calculations on pages 7-8)	Disposition #2 is between LLOS and HLOS. 1.9746 RWP	Disposition #3 is four days over HLOS. 2.5982 RWP	5.0924 RWPs
Case-Mix Index (CMI) = Sum of RWPs/#Cases = 1.6974	avg DRG relative weight for a DRG or group of DRGs. Provides measure of relative case complexities.		.5196 RWPs	1.9746 RWPs	2.5982 RWPs	5.0924/3 = 1.6974 (CMI)

Table 6. Factors used in PPS and Transfer Payment Methodology

	Adjusted Standardized Amount (ASA)	standardized costs by grouping hospitals into 3 locational categories	RWPs (USING OUTLIER WEIGHTS)				RWPs (USING DRG REL. WEIGHTS)	
			LARGE URBAN	OTHER URBAN	RURAL	ASA*	RWPs (USING OUTLIER WEIGHTS)	RWPs (USING DRG REL. WEIGHTS)
			\$3,908	\$4267	\$5,066	\$3000	5.0924 RWPs	5.9238 RWPs
Payment to MTF = #Dispositions X DRG Weight X ASA = MTF Reimbursable Amount $= (3 \times 1.9746) \times \$3000 = 5.9238 \times \$3000 = \underline{\$17,771}$								
Payment to Hospital = (with Outliers) X ASA = Medicare Reimbursable Amount $= 5.0924 \times \$3000 = \underline{\$15,277}$								
* Large Urban category -- ASA price has been adjusted for wage area index.								

Table 7. Demonstration of MTF and Medicare Reimbursement

IV. TRANSFER PAYMENTS

A. GENERAL

As the MHSS transitions to a fully capitated system, significant policy issues become apparent. One of these significant policy issues is the transfer payment concept, which is specifically unique to the military. Health Affairs has defined transfer payments as being a "major component of the MHSS capitation-based resource allocation system". [Ref. 18]

Although the transfer payment policy has not been fully implemented as of this date, this chapter will discuss the tenets of the policy and methodology as published by Health Affairs and Chapter V will discuss some of the possible implications for the MHSS.

B. THE NEED FOR TRANSFER PAYMENTS

1. Limited Resources

As discussed in Chapter II, under true capitation, all beneficiaries wishing to use the MHSS would be enrolled with only one MTF and that MTF commander would then assume the responsibility for providing care health services to that enrolled population, for a fixed amount per beneficiary. If an enrolled patient required health care services beyond the capability of the MTF, a payment would be made to another health care provider or medical facility to obtain the required health care.

Under the current modified capitation resourcing methodology, an MTF commander is responsible and funded for providing health services to a defined but not enrolled population. Additionally, the DoD modified capitation approach uses historical data and costs to determine the appropriate level of allocated funding. If historical data and costs are utilized, then an MTF which provided referral services in the past is already resourced for those services at that historical level.

For example, if Hospital A previously provided inpatient health care services for 100 patients referred from Hospital B and 50 patients from Hospital C, then Hospital A would receive the necessary resources (funds) in their capitated allocation to continue providing care to those 150 patients.

Another factor to consider under a modified capitation system is that the user population of an MTF does not necessarily reside in a defined catchment area (40 mile radius of the MTF) for which that MTF commander is responsible. Since military beneficiaries are not enrolled as they are in civilian managed care plans, they are free to seek health care services at any MTF. Also, as seen in the above example, MTFs may refer patients out to other MTFs for their required health care, if needed. Therefore, beneficiaries may receive services at MTFs outside of the catchment area in which they live.

As previously noted, MTFs have funds in their base to treat a majority of these patients based on their historical level of referrals from outside their facility. However, if a noncatchment area beneficiary received care from an MTF and was

not included in the MTF's original base, then a transfer of funds should occur to offset the MTF's additional cost. [Ref. 2]

From our above example, it was pointed out that Hospital A was resourced for 150 patients referred from Hospital B and C, but Hospital A is not resourced for the 151st patient referred from either of those facilities.

2. Cost Shifting

With a modified capitation resource allocation system, there is an incentive to shift beneficiaries to other components of the MHSS. Workload shifts, whether the result of Base Realignment and Closure (BRAC) driven population changes, clinical referral patterns or managed care decisions, could adversely affect the operating costs of referral centers and result in "windfall profits" to referring facilities. [Ref. 2]

Consider an interesting phenomenon that occurred prior to the implementation of DoD-wide capitation in FY94 (the U.S. Army started capitating their MTFs in FY93). Health Affairs, after reviewing MHSS workload data from FY92 to FY93, observed the following:

Based upon the changes in total relative weighted product (RWP) workload, the impact of the capitation incentive is apparent in the marked difference in percent reductions in workload among the three Services. The Army (almost all under capitation in FY93) reduced their RWP workload by 16%, far exceeding the decrease in population, while the other two Services reduced their overall inpatient workload by 4% and 5%. This tends to prove that capitation has a fairly early impact on workload planning and clinical decision making.

Also, some of the workload reduced by the Army appears to have shown up in Air Force and Navy MTFs. Further analysis may reveal that some portion of the Army reduction is due to the reduction of long

stay "outlier" RWPs as the Army clinicians began to reduce lengths of stay. Also, some of the reductions may be due to legitimate utilization management initiatives (changing inpatient surgery to the ambulatory setting), but as stated above, there may have been some cost shifting from the Army to the other two Services (who probably welcomed the workload under their FY93 workload based budget). Some of this reduction could have been legitimate utilization reductions (the Army reduced their own catchment workload by 14% and their own non-catchment workload by 26%), but without the same incentive at Air Force and Navy hospitals, some of the workload may have shifted. [Ref 19]

If MTF commanders are to be fully responsible for the total health care costs of a defined population, the appropriate incentives must be placed upon MTFs to prevent workload shifting and to encourage aggressive management of referrals.

The transfer payment policy addresses high volume, low cost outpatient and ancillary referrals (e.g., central clinical labs.), but pertains primarily to inpatient referrals, which represent approximately \$450 million (FY93) of the DHP.

Outpatient and ancillary referral patterns are to be managed by the responsible regional lead agent in coordination with the affected MTF(s) and Service(s). Any reimbursements will occur only after a mutually agreed upon workload baseline has been exceeded.

Transfer payments, then, are designed to facilitate the transfer of funds for inpatient referrals exceeding a historically funded level and provides a mechanism for referral MTFs to recoup their full average cost of providing additional services. The transfer payment policy is the mechanism to transfer Operations & Maintenance (O&M) funding between MTFs and Services for inpatient referral services and is intended as a resource allocation/leveling mechanism; not a

fee-for-service system. In other words, the policy, as currently written, is intended to "move funds to where the care is provided" [Ref 2].

To implement the transfer payment policy and concepts just described, a methodology was developed that utilized existing information systems in the creation of MTF specific costs per RWP and two baselines for each MTF.

C. BASELINES

Our discussion of the transfer payment methodology begins with defining baselines. Inpatient referral workload baselines for each MTF have been established utilizing historical data from RCMAS. Workload data from FY93 was adjusted for population changes (i.e., BRAC, changes in health care services rendered) and used to determine FY95 MTF RWP baselines. Appendix A provides the individual MTF FY95 notional (suggested) RWP baselines as published by Health Affairs (FY96 baselines have not been published). The Military Departments can adjust the notional baselines for their MTFs, but must submit those adjustments to Health Affairs for approval prior to an established deadline.

As previously discussed, baselines do not represent the actual number of referrals, but their aggregate value in RWPs. All baselines are expressed in terms of base relative weighted products (RWP). The base RWP for a diagnosis related group (DRG) is the RWP or relative weight assigned to that DRG and does not include additional RWPs for outlier cases. There are two inpatient baselines established for each MTF; a receivable and a payable baseline.

1. Receivable MTF Baseline

Although the terminology may seem confusing², the receivable baseline is simply the amount of inpatient workload an MTF may refer out to another MTF without having to pay that facility. In effect, it is a transfer out of RWP. You may also think of it as representing the amount of "referral credit" an MTF has with the direct care part of the MHSS and also as the medical care it's beneficiaries were historically entitled to receive from other MTFs. Remember, the cost of care for those referrals was included in the medical capitated allocation of the referral MTF. Referring MTFs pay for care only if their total receivable baseline is exceeded.

For example, Hospital A's receivable baseline, expressed in RWPs, is 524.98. Therefore, Hospital A may refer out up to 524.98 RWPs to other MTFs before Hospital A is required to make a transfer payment to other MTFs.

Incentives do exist for MTF commanders to fully utilize their entire RWP receivable baseline. The receivable baseline can be optimized by referring out only necessary and cost effective care. Thus, those MTFs which can reduce their receivable baseline requirements (i.e., through utilization management) will have "excess" referral credit available within the direct care system. This excess or unused capacity in MTFs can then be employed to capture current CHAMPUS workload.

²Note that OASD/HA uses "transfer payment" to describe the concept for calculating a price which is either paid or due from another organization. Technically an amount due is a receipt. In this thesis, the term transfer payment is used in the broader meaning to identify either a payment or receipt.

2. Payable MTF Baseline

This baseline is the amount of inpatient care an MTF may provide to noncatchment and other MTF catchment area beneficiaries without a transfer payment receipt. In effect, it is a transfer in of RWPs.

The RWP payable baseline represents the relative workload in providing health care services by MTF on behalf of other MTFs or for beneficiaries living outside catchment areas. This RWP payable baseline actually consists of two types of workload -- inpatient health care services provided to noncatchment area beneficiaries on behalf of a Military Department and inpatient health care services provided to other MTF catchment area beneficiaries.

3. Illustration of Receivable and Payable Baselines

Figure 6 provides an illustration of the baseline concept for Camp Swampy. The numbers contained within the dashed line area represent the RWPs accumulated (relative workload) in providing inpatient health care services at Camp Swampy. Thus, inpatient services provided at Camp Swampy accumulated a total of 1494.13 RWPs, however 222.4 RWPs were from "noncatchment" areas and 140.15 RWPs were referred into Camp Swampy "from other MTFs" (The 980.3 RWPs for CHAMPUS are independent from the baselines).

The Camp Swampy RWPs accumulated under "Noncatchment" and "From Other MTFs" represent the total payable baseline, $(222.4 + 140.15) = 362.55$ RWP payable baseline. The line titled "To Other MTFs" represents Camp Swampy's total relative workload (760.88 RWPs) that was referred out to other MTFs. These

760.88 RWPs represent Camp Swampy's total receivable baseline (i.e., credit with the direct care system). Figure 7 provides a summary of the illustration.

ILLUSTRATION OF CATCHMENT AREA BASELINES				
INPATIENT BASE RWP FOR CAMP SWAMPY AH				
	CATCHMENT	NONCATCHMENT	FROM OTHER MTFs	
CAMP SWAMPY AH	1131.58	222.4	140.15	1494.13
CHAMPUS	980.3			
TO OTHER MTFs	760.88			
TOTAL	2872.76			
NONCATCHMENT + FROM OTHER MTFs = PAYABLE BASELINE = 362.55				
TO OTHER MTFs = RECEIVABLE BASELINE = 760.00				

Figure 6. Illustration of Catchment Area Baselines. From [Ref. 18]

CAMP SWAMPY AH 1995		
INPATIENT BASE RWP (All figures are in terms of RWPs)		
	DIRECT INPATIENT CARE PROVIDED	INPATIENT CARE PROVIDED
NONCATCHMENT AREA	222.40	
FROM OTHER MTFs	140.15	
PAYABLE BASELINE	362.55	
CATCHMENT AREA	1,131.58	1,131.58
TOTAL DIRECT INPATIENT CARE PROVIDED	1,494.13	
TO OTHER MTFs=		
RECEIVABLE BASELINE		760.88
CHAMPUS		980.30
TOTAL CATCHMENT AREA		2,872.76

Figure 7. Summary of Catchment Area Baselines

To assist MTF commanders, lead agents, and other interested parties in tracking the RWPs for receivable and payable baselines, the RCMAS system provides a standard report format for each MTF's baseline data for the current year. This standard report is titled "Patient Origin and RWP Summary". A copy of the report is provided in Appendix B.

D. WHEN WILL TRANSFER PAYMENTS OCCUR?

As discussed in the previous section, RWP receivable and payable baselines are calculated, approved and established annually for each individual MTF. The next question to answer is how do the receivable and payable baselines determine when a transfer payment is necessary? The calculation of the actual transfer payment (i.e., dollar amount) will be discussed in a later section of the chapter while this section will focus upon when a transfer payment will be required, in accordance with current policy.

Basically, MTFs "trigger" a transfer payment or receipt when they exceed their RWP receivable or payable baselines. There are several possible scenarios that could occur to bring about a transfer payment or receipt.

To simplify the discussion, various case studies will be presented using three hypothetical MTFs, one from each Service, within one TRICARE Health Service Region (HSR). It should be noted that the case studies could be applied to several MTFs across several HSRs.

Figure 8 presents three MTFs, a U.S. Air Force (USAF) Hospital, (USA) Hospital, and a U.S. Navy (USN) Medical Center located in fairly close proximity to

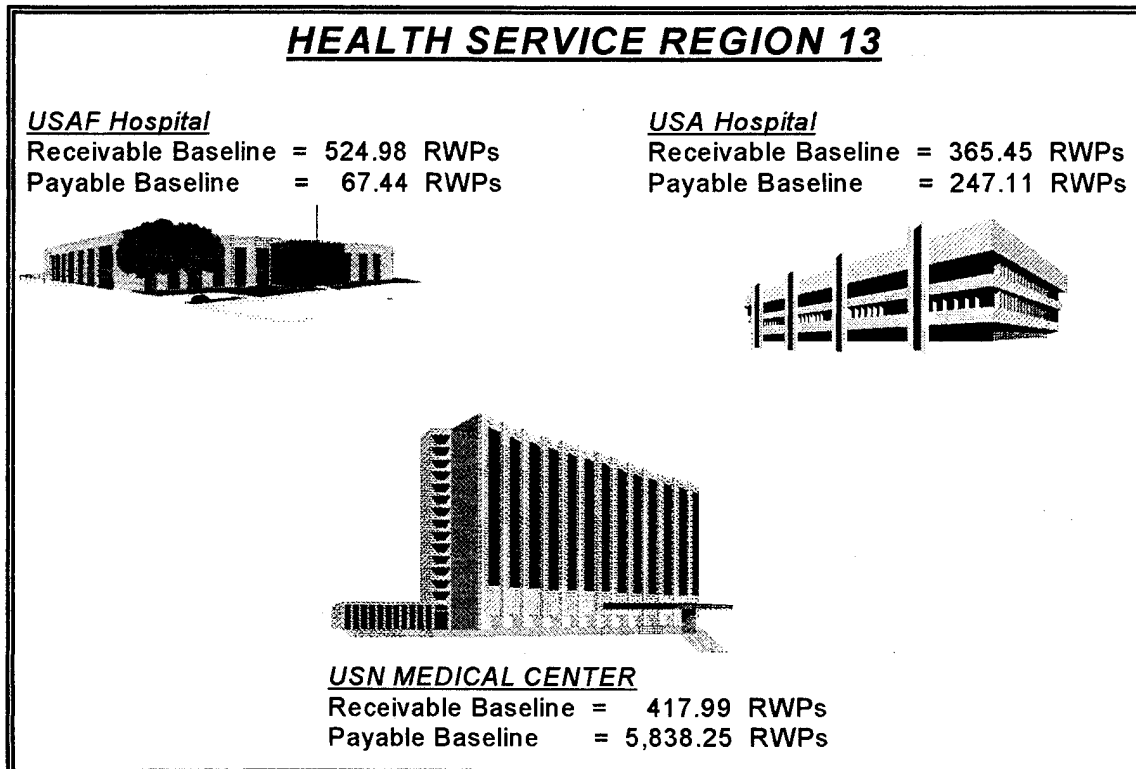


Figure 8. Receivable and Payable Baselines of Three MTFs

each other within HSR 13. Assume that the USN Medical Center is a much larger medical facility than the others. The individual MTF receivable and payable baselines were approved by Health Affairs on January 1st of the current year.

Upon further review of Figure 8, one notices that the USAF Hospital has a rather large receivable baseline (524.98 RWPs) relative to it's payable baseline (67.44 RWPs) and that the USN Medical Center has a large payable baseline (5,838.25 RWPs) relative to it's receivable baseline (417.99 RWPs).

The larger receivable baselines for the USAF and USA hospitals are consistent with the fact that smaller facilities have limited capabilities and must refer more complex cases out to larger tertiary care facilities, such as the USN Medical

Center. Conversely, large tertiary care facilities that offer a broad range of health care services, such as the USN Medical Center, tend to have large payable baselines (transfers in of RWPs) relative to their receivable baselines (transfers out of RWPs).

1. Referring MTF Exceeds Receivable Baseline

Now suppose that over the course of the current year, the USAF Hospital has referred a number of patients to the USN Medical Center and have calculated their "transferred" relative workload to equal 600 RWPs. Similarly, the USA Hospital has calculated their referrals to the USN Medical Center to equal 300 RWPs. Figure 9 presents the current situation as Case Study #1.

In this case, the USAF Hospital has exceeded its receivable baseline by 75.02 RWPs ($600 - 524.98 = 75.02$ RWPs), but the USA Hospital is still under its receivable baseline by 65.45 RWPs ($365.45 - 300 = 65.45$ RWPs). The USN Medical Center, after subtracting out the RWPs from the other two MTFs, is still under its payable baseline by 4,938.25 RWPs ($5,838.25 - 600 - 300 = 4,938.25$ RWPs). Although the USN Medical Center has more than enough RWPs left under its payable baseline to perform additional referral workload, the USAF Hospital should still transfer funds to reimburse the USN Medical Center for a total of 75.02 RWPs. Thus, a transfer payment will always be triggered when a referring MTF's total receivable baseline is exceeded, even though the referral MTF's total payable baseline may not have been exceeded.

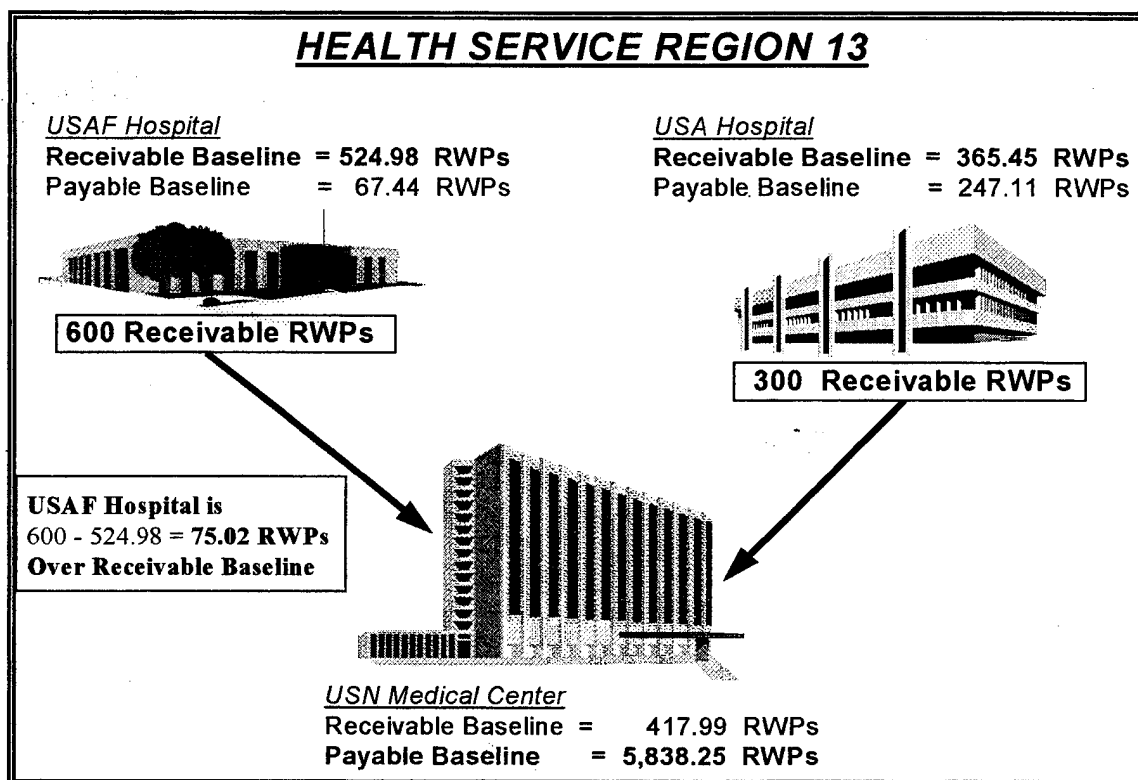


Figure 9. Case Study #1. USAF Hospital Exceeds Receivable Baseline

Current policy states that once a referring MTF (the USAF Hospital) exceeds its receivable baseline, that the referring MTF should begin computing the dollar value of accrued referrals that fall into this category using the referral MTF's transfer payment price. During scheduled reviews by higher authority headquarters (monthly or quarterly per Military Department discretion), this dollar amount will potentially be withdrawn from the referring MTF's O&M allocation and distributed to referral MTFs that have exceeded their payable baselines. [Ref. 2] Although the current policy is still somewhat vague about when and how the actual transfer of funds will take place, a transfer payment will always occur in this particular situation.

2. Referral MTF Exceeds Payable Baseline

A transfer payment will also be triggered when a referral MTF's total payable baseline is exceeded but the referring MTF has not exceeded its total receivable baseline.

Figure 10 presents Case Study #2 which is a slightly different scenario with the addition of referrals "from other MTFs" (other than the USAF and USA hospitals) and "noncatchment areas". Additionally, note that the USAF and USA hospitals are still under their current receivable baselines.

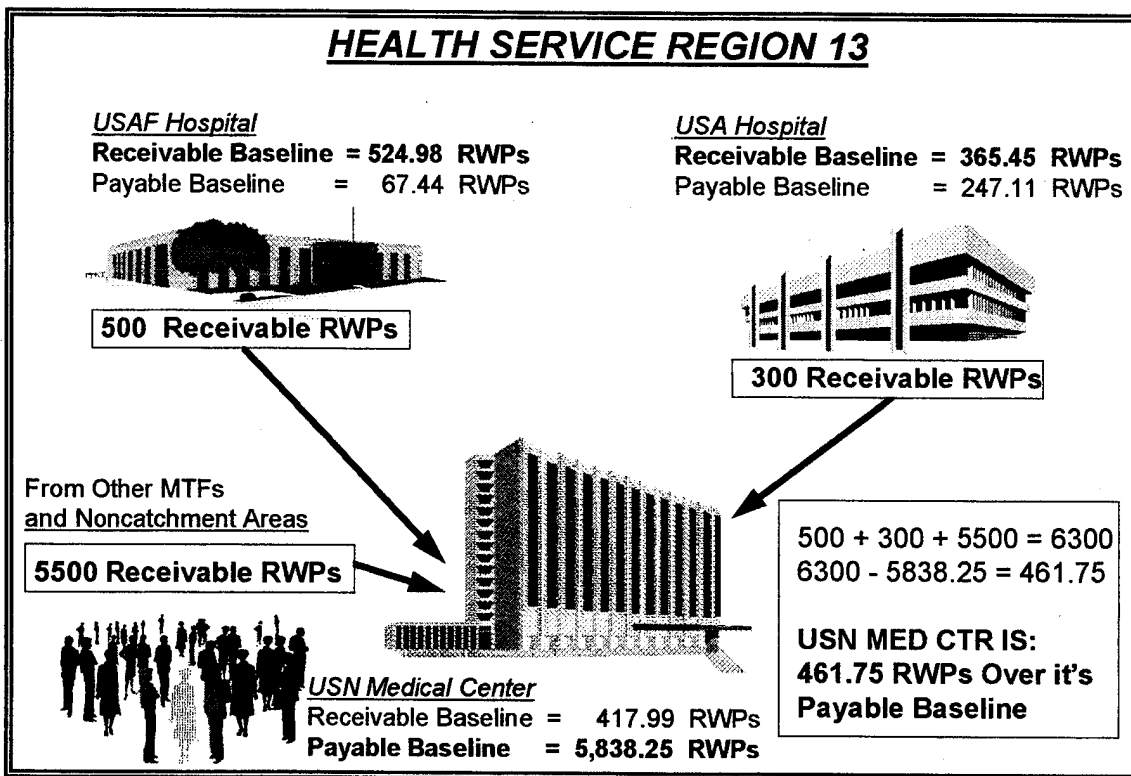


Figure 10. Case Study #2. USN MEDCEN Exceeds Payable Baseline

In Case Study #2, the USN Medical Center has provided services to referred patients from the USAF Hospital, USA Hospital, "other MTFs" and "noncatchment areas", that equal RWPs of 500, 300, and 5500, respectively, for a total of 6,300 RWPs. Therefore, the USN Medical Center has exceeded its established payable baseline by 461.75 RWPs ($6,300 - 5,838.25 = 461.75$ RWPs). The USN Medical Center, in essence, is being asked to provide care for which it may not have funds (total payable baseline is exceeded) and the referring MTFs are not required to pay since they are still below their receivable baselines. The total number of patient referrals from the USAF Hospital, USA Hospital, "other MTFs" and noncatchment areas contributed to the USN Medical Center exceeding its total payable baseline.

Similar to the transfer payment concepts highlighted in the previous case, the referral MTF's (i.e., USN Medical Center) Military Department may require the referral MTF to begin computing the dollar value of accrued referrals (transfers in) using its transfer payment price. Although, in this case, it is less clear "who" should pay for these additional RWPs, the referral MTF should subsequently receive O&M funding commensurate with its accrued "earnings."

3. When Both Receivable and Payable Baselines are Exceeded

Figure 11 presents Case Study #3, the final scenario that will be discussed in this section. A transfer payment will always be triggered when both the total receivable baseline of a referring MTF and the payable baseline of the referral MTF have been exceeded.

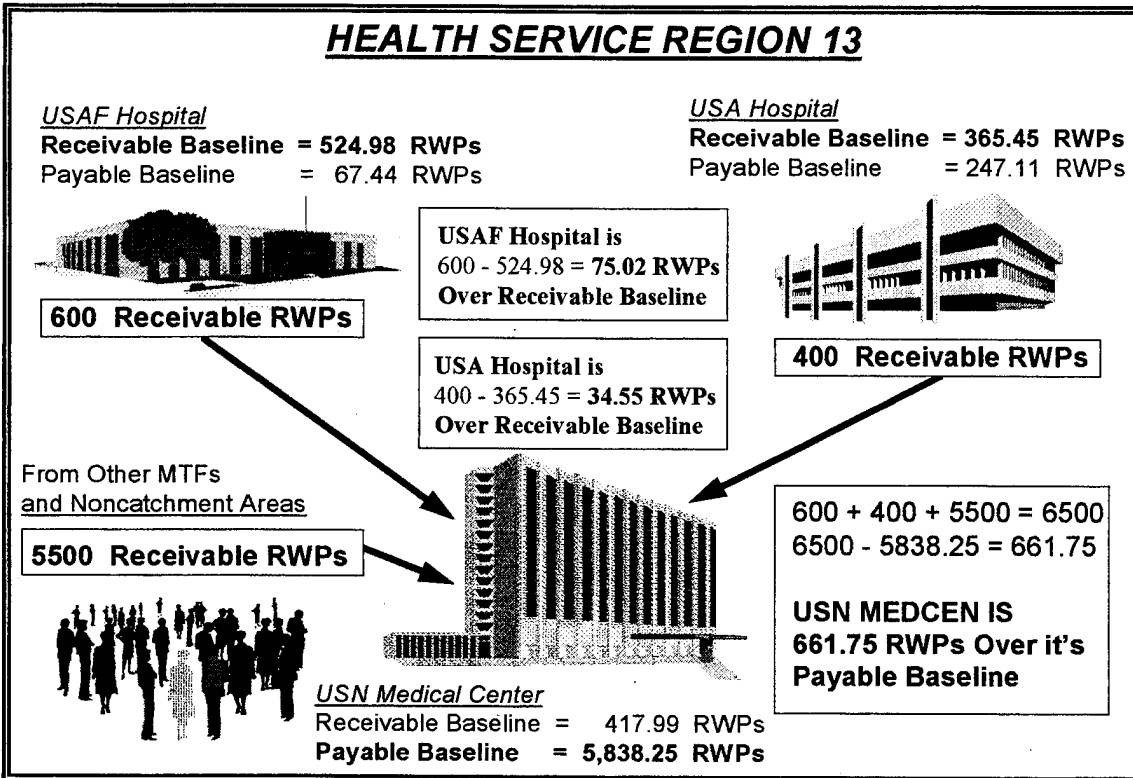


Figure 11. Case Study #3. Referring and Referral MTF Exceeds Baselines

As shown in Figure 11, the USAF and USA hospitals have exceeded their receivable baselines by 75.02 and 34.55 RWPs, respectively. This effect, combined with the 5500 RWPs from "other MTFs" and "noncatchment areas", have contributed to the USN Medical Center exceeding it's payable baseline by 661.75 RWPs.

Since the receivable baselines of both referring MTFs (USAF and USA hospitals) were exceeded, both MTFs will have to reimburse (i.e., transfer payment) the referral MTF (USN Medical Center) an amount commensurate with the RWPs exceeding their respective baselines. In this case, the MTF providing the care (USN Medical Center) for which the patient was referred is responsible to initiate

billing. Again, the procedures to accomplish the actual transfer of funds are still under review (a date for resolution has not been set).

4. Managed Care Support (MCS) Contracts

Currently, the transfer payment policy states, "Since the MCS contractor is an extension of the MTF when caring for CHAMPUS eligible beneficiaries, the transfer payment policy should directly affect a contractor when the referral MTF has exceeded its payable baseline" [Ref. 2].

Although this part of the policy is still under review, the reasoning behind the policy statement is that if an MTF had to make a referral, then the referring MTF would ultimately would have had to use direct care O&M funds for the patient's care anyway -- either by continuing to provide the care in the MTF, initiating a transfer payment to another MTF, or by issuing a nonavailability statement (NAS, i.e., approval to use CHAMPUS). The issuance of a NAS could increase the price of the MCS contract beyond the CHAMPUS baseline and that financial responsibility would then be allocated back to the MTF through the informal bid price adjustment reports. [Ref. 2]

For example, if MTF B has already exceeded it's payable baseline, then the MCS contractor would pay MTF B for any additional services beyond MTF B's payable baseline. Conversely, if MTF B is still below it's payable baseline, then the MCS contractor would not have to pay. Subsequently, the bid price adjustment would be adjusted to reduce any contractor gains (increase loss). Discussion of the bid price adjustment is beyond the scope of this thesis.

5. Specialized Treatment Services (STS)

The use of the specialized treatment service (STS) by a MCS contractor may involve inter-region referrals (STSs have a 200 mile catchment area). Similar to the previous situation, the MCS contractor will not have to pay the STS facility for speciality service inpatient care if the STS facility is not over its total payable baseline. However, under current STS operating policy, a NAS will be issued even if the STS facility is over its payable baseline (since STS facilities were designed to capture expensive CHAMPUS cases).

If a NAS was issued by an MTF and the STS facility exceeds its payable baseline, the MCS contractor will consider the STS facility as the preferred source of health care (if the required specialty care applies). The MCS contractor must then give the STS facility the right of first refusal, provided the cost of the speciality service is less than the civilian cost of the speciality service. [Ref. 2]

Thus, transfer payments will be made when: a referring MTF exceeds its receivable baseline; when a referral MTF exceeds its payable baseline; and when both the referring MTF exceeds its receivable baseline and referral MTF exceeds its payable baseline. Additionally, the MCS contractor is included in the transfer payment methodology and will similarly make a payment under the circumstances described above.

This section discussed how baselines are used in determining when a transfer payment is required. The following section discusses the methods and calculations used in determining the actual "dollar" amount of the transfer payment.

E. THE TRANSFER PAYMENT PRICE

As discussed in Chapter III, an FY95 adjusted standardized amount (ASA) per RWP has been developed and calculated by Health Affairs for each individual MTF and is listed in Appendix A. Recall, that the individual MTF ASAs represent the adjusted operating costs for treating all beneficiaries in the direct care system in all DRGs at individual MTFs. These "full cost" ASAs include all expenses (labor and non-labor) associated with Category III activities under capitation budgeting. For all practical purposes, the individually calculated ASA rates are an MTF's average cost per RWP (regardless of DRGs).

MTFs have the option of developing their own specific MTF transfer payment price per RWP, but it must be more than the MTF's marginal cost³, less than the MTF's ASA cost, less than CHAMPUS average cost, and contain all costs (O&M and Military Personnel pay). If an MTF develops its own specific transfer price per RWP in lieu of the ASA rate that was provided, the following methodology could be employed.

The Case Mix Index (CMI) was defined in Table 6 (Chapter III) as a tool that could be used to judge the types of diagnoses (i.e., complexity) being treated at a particular hospital or MTF. The CMI for an MTF is calculated by dividing the summed RWPs for all dispositions in an MTF by the number of dispositions. An

³ Health Affairs did not specifically define "marginal costs". Some interpret marginal costs to mean "variable costs" or the incremental cost of producing one additional unit of output (i.e., patient).

average RWP per disposition may be calculated for an MTF as a whole as shown by Equation 1.

$$(CMI) \times (NUMBER\ OF\ DISPOSITIONS) = RWP$$

Equation 1. RWP Calculation

The MTF's cost per RWP can also be calculated, but not as easily. First, the MTF has to determine its marginal costs. At the present time, most MTFs do not have a patient level cost accounting system and must rely on other sources of information, such as MEPRS, to assist them in determining their estimates of marginal costs. If an MTF was able to gather the relevant marginal cost data, then Equation 2 could be used to determine the marginal cost per RWP.

$$(MARGINAL\ COSTS) / (RWP) = COST\ PER\ RWP$$

Equation 2. Cost Per RWP

Once the MTF has determined its marginal cost per RWP, it must then adjust it upward (amount adjusted depends on the MTF's objective) because the

MTF's derived average cost per RWP, as stated earlier, must be greater than it's marginal cost, less than the ASA cost, and less than the CHAMPUS average cost.

Figure 12 is Case Study #4. It presents the three MTFs from the earlier cases and their associated ASA and MTF derived transfer payment price per RWP.

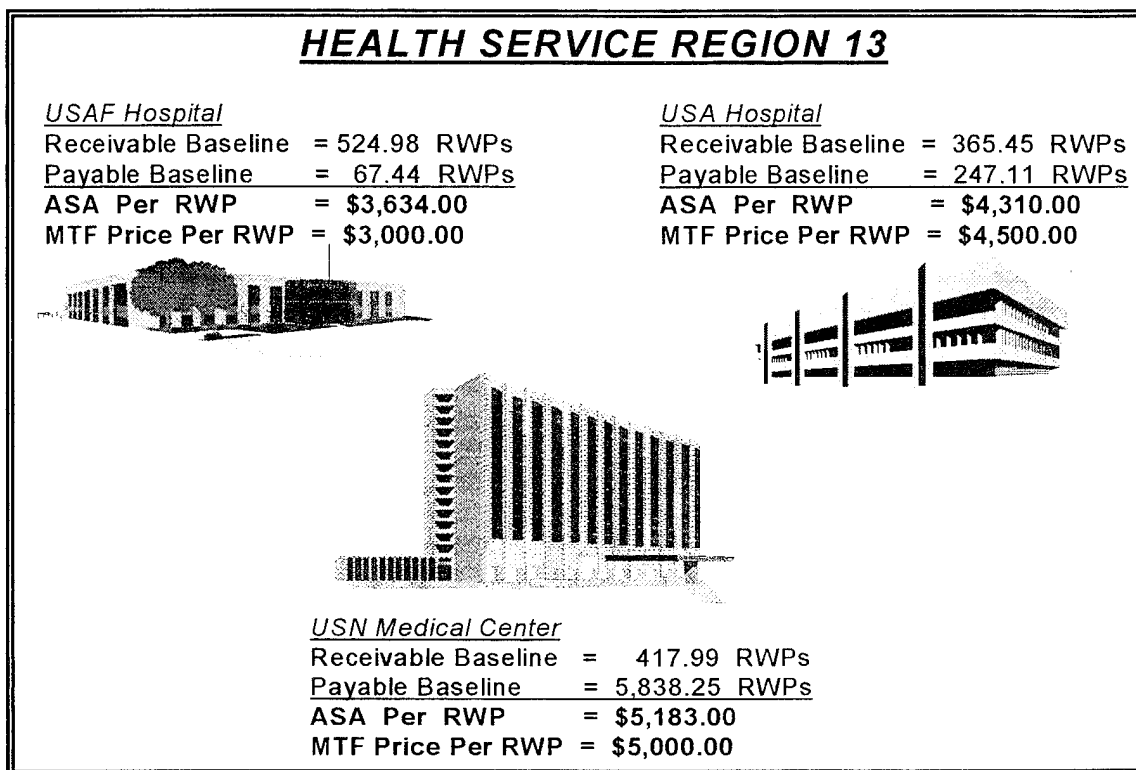


Figure 12. Case Study #4. MTF Adjusted Standardized Amount (ASA) and Derived Price Per RWP

Note that in Figure 12 the MTF derived cost per RWP (\$4,500) for the USA Hospital is greater than the Health Affairs derived ASA price (\$4,310). Therefore, the USA Hospital must use it's assigned ASA price per RWP (\$4,500) in any transfer payment calculations.

The transfer payment price for a particular DRG is computed by multiplying the MTF transfer payment price (the ASA or MTF derived price) per RWP times the base RWP for that particular DRG. As discussed in Chapter III, additional RWPs for outlier cases are not included. Equation 3 provides the formula to calculate the transfer payment for a specific DRG.

MTF or ASA	BASE	DRG
(COST PER RWP) X (DRG RELATIVE WEIGHT) = TRANSFER PAYMENT		

Equation 3. Transfer Payment for a DRG

An illustration may be helpful in understanding the process. Suppose, for instance, the USAF Hospital in Figure 12 has determined that it has exceeded its receivable baseline of 524.98 RWPs by 46.80 RWPs (571.78 - 524.98 = 46.80 RWPs). Additionally, the USN Medical Center is already over its payable baseline. Furthermore, assume that the USAF Hospital has determined that the receivable baseline was exceeded due to the referral of 20 patients for craniotomy (age 0-17), DRG code 003, with a corresponding relative weight of 2.3399 (realistically, this could involve many DRGs and their respective relative weights).

In this illustration, the USAF Hospital must calculate a transfer payment to reimburse the USN Medical Center (or Military Department). The transfer payment price is found by taking the cumulative RWPs of DRG 003 multiplied by the referral

MTF's (USN Medical Center) transfer price. Since the referral MTF's derived transfer price (\$5,000) is less than it's ASA price per RWP (\$5,183), it is the MTF's average cost per RWP. The calculations are as follows:

$$\begin{aligned} 20 \text{ (CASES OF DRG 003)} \times 2.3399 \text{ (DRG WEIGHT)} &= 46.80 \text{ RWPs} \\ \$5,000 \times 46.80 \text{ RWPs} &= \$234,000 \text{ (TRANSFER PAYMENT PRICE)} \end{aligned}$$

Figure 13. Example of Transfer Payment Calculation

Thus, the USAF Hospital should transfer \$234,000 of O&M funds to the USN Medical Center or it's Military Department (as mentioned earlier, the procedures for the actual transfer of funds are still under review). Figure 14 provides a summary of Case Study #4.

As illustrated in Case #2, if the referral MTF had exceeded it's payable baseline and the referring MTF was still under it's receivable baseline, then the referral MTF would then begin calculating the dollar value of RWPs over it's payable baseline using it's own transfer price for reimbursement at a later date.

One other event that may reduce the amount of funds reimbursed from a referring MTF is the effect of patients with third party insurance. If a third party insurance company payment is collected by the referral MTF, the third party insurance payment will be deducted from the final transfer payment charge.

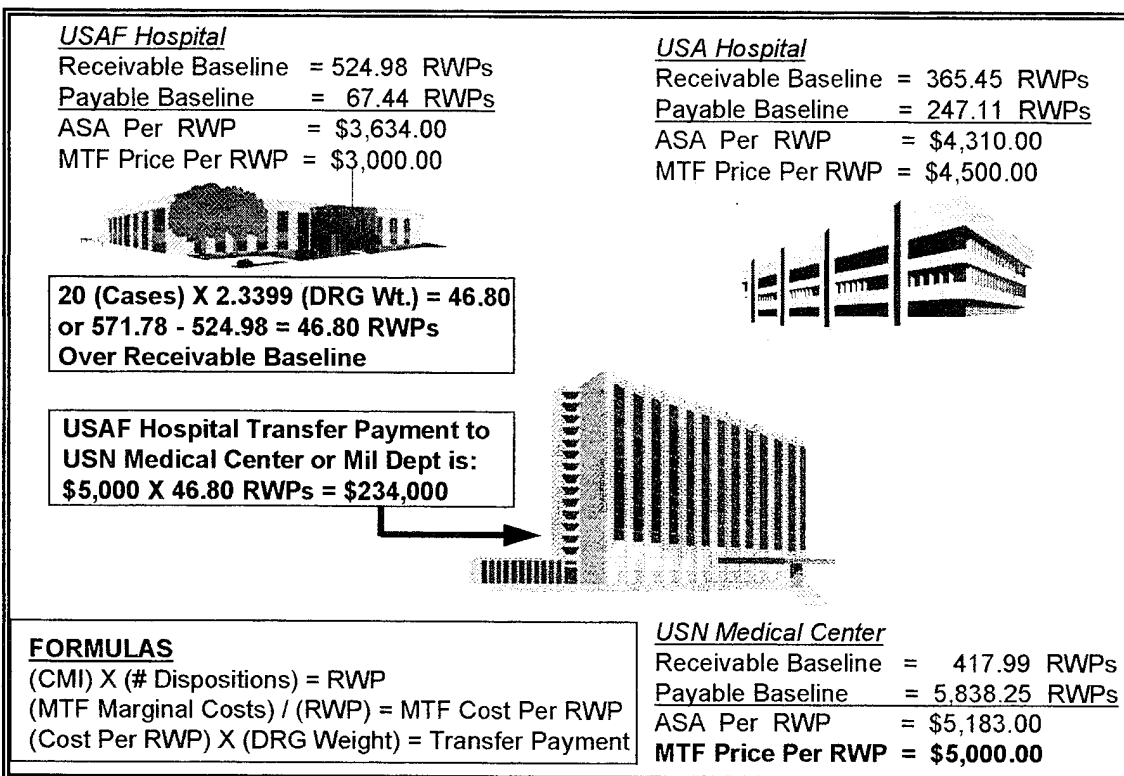


Figure 14. Case Study #4. Transfer Payment from USAF Hospital to USN Medical Center

In summary, this chapter discussed the transfer payment policy as published by Health Affairs. The first part of the chapter discussed why it was needed, the various components created by the policy, which included the receivable and payable baselines, and how they determine when a transfer payment is required. The last part of the chapter examined at how an MTF's transfer price is determined and the calculations used in computing the actual amount of funds to transfer.

It must be reiterated that although the policy itself has been published, full implementation has not yet occurred within the MHSS. As with all new policies, a period of review and adjustment will precede any implementation. Chapter V will

discuss and present those elements of the policy that have fallen under review by the Services.

V. IMPLEMENTATION ISSUES

A. GENERAL

As noted in Chapter IV, the transfer payment policy, although published, has not been fully implemented. There have been several implementation issues raised by the Services that deserve further review. Although the transfer payment policy has brought into focus the need to aggressively manage referral patterns in the MTFs, some individuals question whether there is an actual need for this policy in the direct care system of the MHSS. This chapter will present a compilation and discussion of the major implementation issues raised by the Services. Since the success of the transfer payment concept is heavily dependent upon the availability and analysis of data, the first section discussed will be the information systems utilized in the transfer payment methodology.

B. INFORMATION SYSTEMS

As stated by the Government Accounting Office (GAO):

Lack of adequate, timely, local information on health care provided to beneficiaries has impeded improvements to the cost-effectiveness of the MHSS. [Ref 30]

Under a capitation methodology, especially as it applies to the transfer payment concept, an MTF commander must have accurate and timely information to be able to properly evaluate the MTF's "business practices" and cost effectiveness.

Although Health Affairs has taken steps to streamline the automated information systems (AIS) processes, eliminate duplication, standardize where possible, and focus upon functional economic analysis [Ref 4], 13 Jul 95), the full implementation and effectiveness of the transfer payment concept will be hindered by the lack of accurate and timely data.

1. Retrospective Case Mix Analysis System (RCMAS)

The RCMAS information system is the primary system used in determining the status of an MTF's completed workload (RWPs accumulated). As discussed in Chapter II, RCMAS provides extensive capabilities in functional analysis and reporting of health care data, but it suffers from three deficiencies: data accuracy, incomplete data (FY95 receivable and payable baselines were projected based on FY93 RCMAS data), and usability.

a. Accuracy

Military Department representatives have expressed their concern about the accuracy and completeness of RCMAS data. For example, a representative from BUMED commented that a review of recent referral data provided by RCMAS indicated that several patients were referred from a CONUS MTF to an unnamed MTF in Germany, which is most unusual, if not highly unlikely [Ref 20].

RCMAS analysts [Ref. 21] indicated that the flow of data starts from the individual MTF and is then forwarded to their respective medical headquarters,

where the data is supposedly validated. It is then forwarded to RCMAS for integration into the RCMAS database.

The RCMAS analysts consider the data they receive to be already validated (since it passes through the Services' respective medical headquarters), but were not aware of any statistical study that was conducted on the accuracy of RCMAS data [Ref 21]. The thesis author was also unable to determine if any such study has been ever conducted.

b. Incomplete Data

Another factor of concern regarding RCMAS is the incompleteness of data. As stated above, the flow of data is from the individual MTF to their respective medical headquarters, and then to the RCMAS analysts, where it is integrated into the system. RCMAS analysts state that the incomplete data in RCMAS data is not caused by the timeliness in RCMAS data input, but rather the long time it takes to gather and validate (at the respective Services' medical headquarters) the information. The analysts stated that RCMAS is usually only one and one-half months behind in providing up-to-date information, although it is incomplete.

Several things could contribute to incomplete data; delays in MTF reporting due to continued updating of patient records and possibly delays in receiving CHAMPUS data. CHAMPUS inpatient beneficiaries have up to one year after discharge to file a claim. [Ref 21]

The U.S. Air Force Medical Department stated that RCMAS is typically three months behind the current reporting month and that this delay is not conducive to their monthly reporting requirements to the Air Staff. Additionally, the Air Force stated that since the Composite Health Care System (CHCS) is the repository for information going into RCMAS and is of a more timely nature, they will attempt to utilize the data from CHCS instead of RCMAS. [Ref 22]

Thus, the timeliness issue of RCMAS affects the accuracy with which MTF commanders can track their RWP receivable and payable baselines. Since RCMAS data is at least one and one-half months behind (a year if the completeness factor is considered), an MTF won't realize that a baseline has been exceeded until much later, unless they are tracking the data separately by other means.

Additional problems occur at the end of the fiscal year, when an MTF's O&M funds expire and are recouped. If a transfer payment must be made, it will have to be made from the following year's funding because an MTF may not know that it has exceeded a baseline until the RCMAS data is complete. This situation may pose financial planning problems for MTFs in the projection of available funds in the upcoming year.

c. Usability

The RCMAS system offers a myriad of standard reports but its usability (i.e., user friendliness) by the average analyst is suspect. An analyst at the U.S. Army Medical Command (USAMEDCOM), in a recent interview [Ref. 23],

indicated disappointment in RCMAS's lack of pertinent transfer payment reports and analyses (RCMAS does provide Patient Origin and RWP Summary Report). Also, RCMAS does not easily lend itself to certain user requested customized reports and analyses. In such cases, RCMAS reporting and analysis capabilities must be modified by RCMAS personnel (this is done through user submitted DMIS Deficiency Report).

2. Medical Expense Performance and Reporting System (MEPRS)

MEPRS data allows an MTF to determine it's costs at the work center level, if desired. Similar to the problems associated with RCMAS, data accuracy is a concern, but again thesis research was unable to determine whether or not a statistical study has ever been conducted on the accuracy of MEPRS data. However, personal experience with MEPRS tends to support the need for an accuracy check, especially since the information provided by MEPRS is used in MTF costing analysis and for determining adjusted standardized amounts (ASAs).

3. Resource Analysis and Planning System (RAPS)

As discussed in Chapter II, RAPS provides modeling and analytical tools to forecast military health care beneficiary population, workload, and costs. The models enable RAPS users to estimate and analyze the impact of alternative assumptions and policy decisions on resource requirements. Proper identification of the population base is essential for successful planning, programming, and execution of a capitated resource allocation system. [Ref 4]

RAPS projections support capitation-based allocation by converting eligible populations to user estimates. Projections of users are calculated by applying user ratio estimates from semi-annual surveys (mentioned in Chapter II) to projections of eligible beneficiaries. Thus, RAPS produces both eligible and user population projections. [Ref 24]

The semi-annual survey utilized by RAPS to project actual users undergoes extensive statistical analysis and is the best source of current population projections, but again the data must be accurate since it is critical to MTF commanders and Lead Agents in their workload projections.

Therefore, if MTF commanders and Lead Agents are to accurately project their workload and referral patterns, an enrollment system that captures all beneficiaries, regardless of the TRICARE benefit option chosen, should eventually be instituted.

Health Affairs recognizes the deficiencies in the current information system and has invested heavily in "upgrading" current information system capabilities.

The Ambulatory Data System (ADS) will provide accurate and timely analysis of outpatient data (and could be used to extend the transfer payment methodology to the outpatient side) and the Corporate Executive Information System (CEIS) will provide critical management information to MTF commanders. However, during the interim, the transfer payment methodology will be less effective than originally planned.

C. INCENTIVES

Under capitation budgeting, an MTF is allocated a fixed amount per beneficiary for a defined catchment area population. However, the users of an MTF do not always come from the facility's catchment area. As seen in the case studies of Chapter IV, users may include patients from noncatchment areas and referrals from other catchment areas. Consequently, capitation resource allocation may serve as an incentive for MTFs to shift beneficiaries to other facilities within the MHSS (as demonstrated by the U.S Army's experience discussed in Chapter IV). To prevent this shift and encourage more aggressive management of referrals, Health Affairs established the transfer payment policy.

The transfer payment policy was not designed to be a money making venture, but to ensure equitable costing under a capitated system. The policy also does not contain any penalties for MTFs which fall below their payable baselines, nor does it provide for refunds to facilities which do not fully utilize their receivable baselines. Unused capacity relative to baselines should be directed toward recapturing CHAMPUS workload. [Ref 25]

Although the policy was not meant to be a "money making" mechanism, it could be utilized as such. As an interesting note, BUMED stated [Ref. 20] that a U.S. Army MTF recently contacted them for a transfer payment regarding a certain procedure that they wanted to "buy" from a Navy MTF. The Army MTF probably had excess capacity for this particular procedure and, if provided the additional funding (through transfer payment from the Navy), it would absorb the added Navy workload.

The mechanism to transfer workload is available under the transfer payment concept and could be used to establish new referral patterns, although this is not the intent. The following question was posed by the Lead Agent of Health Services Region (HSR) 3.

Can regions "buy-out" workload from other regions so new intra-regional referral patterns can be developed (thus minimizing financial implications of inter-regional referrals)? For instance, if the aeromedical evacuation routes are changed, Regions 3 and 4 could "buy-out" their respective historical workloads so new referral patterns can be established. [Ref. 26]

In effect, the transfer payment mechanisms could facilitate such "shifts" in workload. However, the thrust of the policy was only meant to "shift" funds to where the care is actually provided -- not to change the structure in which those health care services are provided.

Referral MTFs (transfers in) could possibly increase their allocated funding by providing care in excess of the total payable baseline. This can be accomplished by referral MTFs developing transfer payment prices that are less than other health care agencies to entice referring MTFs to refer patients to their facility. [Ref 26]

If a referral MTF was in close proximity to another MTF offering similar health care services, there would be an incentive to compete for referral workload. Once the payable baseline was exceeded, referral MTFs would begin accumulating the dollar value of those RWP's over their baseline and would receive reimbursement through the transfer payment mechanisms.

Additionally, the policy states that MTFs have an incentive to reduce their receivable baselines (transfers out) to facilitate the recapture of CHAMPUS workload by referring those instead. Through improved utilization management (UM) techniques, the efficiency with which an MTF operates could improve to the point where the receivable baseline is in fact reduced, however, the incentive to do this appears to be relatively weak.

For example, if an MTF commander was able to reduce the MTF's receivable baseline and recapture some of the CHAMPUS workload, the MTF commander would not directly receive the funds associated with those CHAMPUS savings. The government would receive 80% of the recaptured CHAMPUS funds, while the Managed Care Support (MCS) contractor would keep 20% of the savings. Although the savings to the government and the contractor could be substantial, there is no direct incentive for the MTF commander to pursue such a course. Subsequently, the incentive for the MTF commander is to fully utilize the MTF's entire receivable baseline.

Another factor that dampens some of the incentives of the transfer payment policy, is the inability to carry over "savings" or "profits" to the following fiscal year. This fact has long been debated in the DoD as seen in a statement by BUMED several years ago before the implementation of the transfer payment policy.

Multi-year appropriations are needed as well as the flexibility to carry money from year to year to facilitate wise and prudent expenditures of money rather than fostering a rush to spend end of year money to avoid loss of funds. Allowing money to carry over fiscal years and to

combine with new appropriations will enable MTFs to accomplish tasks/functions which might not otherwise be achievable. [Ref. 27]

Allowing MTFs to carry over their "savings" resulting from transfer payments would certainly incentivize them to aggressively manage their referral patterns. Health Affairs has indicated that legislation is currently being pursued to allow for a 5 percent "carry over" of total O&M funds [Ref. 28].

The effect of exceeded baselines on health care access is still unclear, but MTFs that have exceeded either their receivable or payable baselines may be tempted to limit access to health care services. Although this action appears to be extreme, the incentive still exists. In any case, if an MTF should refer a TRICARE Prime patient, then the uniform access requirements (published by Health Affairs in 1995) should apply (i.e., travel time should not exceed 30 minutes from home, etc.).

D. PROCEDURAL MATTERS

1. Administration

Many questions remain unresolved in the actual transfer of funds under the transfer payment policy guidelines. For instance, given the problems associated with the timeliness of RCMAS data, when will the actual transfer of funds occur? This question has not been answered as of the date of this thesis, but it appears that an actual transfer of funds may occur when deemed "appropriate" by the Services involved.

Will the actual transfer occur at the headquarters level or will it occur between MTFs? At present, the Services have agreed to simplify the procedure by handling all such transfers at the headquarters level.

The Services are also concerned with the difficulty of administering the transfer payment policy. It has been stated that the policy, if followed as currently written, could be administratively burdening relative to the "value added". For instance, MTFs that have exceeded their receivable or payable baselines would have to monitor their baselines on a daily basis and bill appropriately. Currently, the MTFs are not staffed for this additional task.

Third party insurance implications also increase the administrative difficulties of transfer payments. As stated in the policy, the third party insurance company payment is to be deducted from the transfer payment charge. The referral MTF providing the care is responsible for initiating and monitoring total billing from the third party insurer. Upon receiving the final collection from the insurer, the referral MTF will then balance the bill, if necessary. This requirement would be difficult to fulfill. It requires that the MTFs not only ensure that the third party insurance company is properly billed, but also ensure that any previously paid or billed transfer payment is provided an appropriate credit.

The addition of Lead Agents into this scenario further complicates administration of the transfer payment methodology. GAO noted this in a 1995 testimony before the House of Representatives.

Issues related to lead agent control and authority are inherently complex because TRICARE calls for the lead agent to coordinate all care provided in the region, including contractor provided care.

While TRICARE provides a framework to foster teamwork and regional health care delivery, it remains to be seen whether lead agents will be able to overcome the effects of inter-Service rivalries that have historically hampered efforts to promote joint-Service cooperation in health care delivery. [Ref. 8]

The structure of TRICARE, as you may recall from Chapter II, is such that MTFs receive their funding from their respective Services' medical headquarters and not from the lead agents. It is also interesting to note that a recent conversation with a Service's medical headquarters representative indicated that lead agents of certain regions were not receptive to certain Service specific guidance regarding the transfer payment policy.

In understanding the lead agent's reaction, one must realize that the lead agent is concerned primarily with providing health care services to it's beneficiaries in accordance with the region's health care plan. It is the responsibility of the Services to provide the necessary funding to carry out the regional health care plans. The lead agent, then, is concerned with that portion of the transfer payment policy that may affect the ability of it's regional MTFs to provide the health care services as required by the region's health care plan.

2. Central Fund

The policy indicated that a central fund could be established by the Military Departments to accrue funds generated from transfer payments. This concept is similar to the "cost pool" concept utilized by HMOs. The cost pool accumulates a

percentage of the fixed fees paid by HMO enrollees and is utilized to reduce risk (from higher than expected costs, i.e., referrals) for HMO network providers.

Although two Services contend that the administration of such a fund would be an administrative burden, the U.S. Army has apparently adopted the "central fund" concept as shown in their implementation letter.

Initially, at the beginning of the fiscal year a transfer of payment consolidated withhold will be maintained at MEDCOM (U.S. Army Medical Command) level much as the catastrophic CHAMPUS and supplemental care reinsurance pots. This pot of money will then be utilized to finance inter-Army transfer as needed throughout the fiscal year. Money received from the sister Services for billed workload can then be put into the transfer payment pot, which will filter down to the affected MTF based upon documented UB-92 (Uniformed Billing form 92) billings in the latter part of the fiscal year. [Ref. 25]

As stated earlier, the other two Services have not established a central fund and the effectiveness of the U.S. Army approach is yet to be studied.

3. Adjusted Standardized Amounts (ASAs)

The ASA concept could facilitate comparisons between MTFs, and between MTFs and the private-sector. This would provide some measure of relative performance. However, as stated by BUMED [Ref. 29], there are several potential problems with using the current ASA methodology.

Specifically, the concerns are: the MTF specific ASA rates do not reflect the actual cost of any MTF's cost per RWP; an ASA rate for any MTF is affected by all other MTFs in that Metropolitan Statistical Area (MSA); it would be misleading to compare ASA rates among MTFs; specific MTF ASA rates are not published in the

Federal Register; and that external agencies may misinterpret a MTF's ASA rate as the actual cost of inpatient care.

A recommended alternative approach to MTF specific ASA rates is to replace them with regional ASA rates. [Ref. 29]

E. MANAGED CARE SUPPORT CONTRACT (MCSC)

The participation of the Managed Care Support Contract (MCSC) contractor in the transfer payment policy is perhaps one of the most debated issues. Recall from Chapter IV that if an MTF issues a nonavailability statement (NAS), the MCSC contractor can refer that patient to another MTF vice it's civilian network. However, the contractor will not have to pay for the care if the referral MTF (transfers out) has not exceeded it's total payable baseline. In such a case, an adjustment would have to be made to the bid price adjustment to ensure the contractor does not receive "free" care and credit for the NAS issuance as a result of the same procedure (contractor reimbursements are based on number of NASs issued).

Lead agents and MTFs fear that the contractor will in fact receive a "wind fall" profit if this is not carefully managed. Additionally, some have questioned the legality of using the NAS (since it was designed to authorize CHAMPUS expenditures) as indicated in the policy and the receipt of transfer payments from the MCSC contractor. This issue has apparently been addressed and found to be within legal bounds -- although procedural problems still remain.

The impact on Specialized Treatment Services (STS) is less clear. As noted in Chapter IV, the MCSC contractor must give STSs the first right of refusal for all

applicable referrals, including inter-regional referrals, when STS boundaries are applicable.

Similar to standard MTFs, STS referral facilities will not receive funds through the transfer payment mechanism (from referring MTFs or the contractor) unless their total payable base has been exceeded. As outlined above, the MCSC contractor will not have to pay for STS care until the total RWP payable baseline has been exceeded.

The impact of contractor participation in the transfer payment policy on a newly established 200 mile catchment area for STS facilities and the MCSC contract bid price adjustment is uncertain. In any case, the Services medical headquarters and several lead agents have recommended utilizing other methods of "workload balancing" for the MCSC contractor instead of transfer payments.

F. CURRENT STATUS

As previously discussed, the transfer payment policy was not fully implemented in FY95 and it is interesting to note that not a single dollar was formally transferred between MTFs or Services as a result of the transfer payment policy in FY95. Although several MTFs exceeded their RWP receivable and payable baselines during FY95, the individual Services remained well below their total baselines [Ref. 30].

Table 8 presents the Services' total RWP receivable and payable baselines as compared to the actual FY95 results. The Services, overall, were substantially

under their Services' total baselines. As such, the Services agreed not to implement the formal calculations of the transfer payment methodology in FY95.

Table 9 presents a table of the number of MTFs per Service exceeding their RWP receivable and payable baselines in FY95. Note that one third of the Army's MTFs exceeded their FY95 payable baselines. This was the highest position.

SERVICE	FY95 RWP RECEIVABLE BASELINE	FY95 RWP RECEIVABLE ACTUAL	% DIFF.	FY95 RWP PAYABLE BASELINE	FY95 RWP PAYABLE ACTUAL	% DIFF.
USA	47,276	40,135	-15%	63,759	57,681	-10%
USN	17,766	15,465	-13%	37,147	28,571	-23%
USAF	29,852	25,163	-15%	49,620	40,885	-18%
TOTAL	94,894	80,763	-15%	150,506	127,137	-16%

Table 8. FY95 Service Baselines and Actuals. After [Ref. 31]

SERVICE	TOTAL MTFs BY SERVICE	MTFs EXCEEDING FY95 RECEIVABLE BASELINE	MTFs EXCEEDING FY95 PAYABLE BASELINE
U.S. Army	32	6	11
U.S. Navy	22	4	3
U.S. Air Force	50	5	10
TOTAL	104	15	24

**Table 9. MTFs Exceeding FY95 Baselines by Service.
After [Ref 31]**

Table 10 presents, individually, those MTFs that exceeded their FY95 receivable baselines (transfers out). The transfer payment column was calculated

using the referring MTF's own ASA price (see Appendix A), since the referral MTFs prices were not known to the thesis author. In FY95, the Army would have made transfer payments totaling \$3,918,815, the Air Force \$1,569,859, and the Navy \$8,525,414. Their combined total of \$8,525,414 represents the total amount of funds that would have been transferred to other MTFs.

Table 11 presents, individually, those MTFs that exceeded their FY95 payable baselines (transfers in). In this case, these referral MTFs would be reimbursed for the amount of RWPs over their payable baseline. As directed in the transfer payment policy, these MTFs will compute their "transfer receipts" utilizing an MTF derived transfer price or the MTF specific ASA price. Since the MTF derived prices were not available to the thesis author, the MTF specific ASA prices were used in computing the "transfer receipts". In FY95, the Army MTFs would be reimbursed \$8,918,573, the Air Force \$3,245,898, and the Navy \$132,580. The combined total of \$12,297,051 represents the total amount of funds that would be reimbursed to the referral MTFs. Reimbursement to these MTFs would come either through transfer payments from other MTFs or a direct reimbursement from their respective Services.

Although MTFs with each Service exceeded their FY95 baselines, no Service exceeded their total receivable or payable baselines. One could make an argument that the transfer payment policy incentivized this behavior. In any case, Health Affairs believes that trends for lower utilization will likely continue and at this stage,

in the interim, plans to keep the transfer payment policy in place as a "background" control system. [Ref. 31]

As stated by a former member of the original Health Affairs transfer payment policy committee.

It may sound ideal, but if MTFs truly embrace the paradigm of TRICARE, utilization management, capitation, and good business practice in patient care decisions, a sophisticated structure for MTF-to-MTF transfer payments may prove unnecessary. [Ref. 32]

Certainly, FY95 was an indication that the Services and individual MTFs proved that referral patterns can be managed effectively. However, whether this was a direct result of the transfer payment policy is debatable.

MEDICAL TREATMENT FACILITY	RECEIVABLE BASELINE	RECEIVABLE ACTUAL	DIFF.	% DIFF.	TRANSFER PAYMENT*
ARMY					
BLISS ACH-FT. HUACHUCA	347	390	43	12%	\$177,160
WALTER REED AMC- WASH DC	1583	1940	357	23%	\$1,606,500
BLANCHFIELD ACH-FT. CAMBELL	785	879	94	12%	\$293,656
BAYNE-JONES ACH- FT. POLK	529	772	243	46%	\$1,006,749
REYNOLDS ACH-FT. SILL	933	1071	138	15%	\$468,510
MCDONALD ACH-FT. EUSTIS	1795	1915	120	7%	\$366,240
ARMY TOTAL	5972	6967	995		\$3,918,815
AIR FORCE					
366TH MED GRP- MOUNTAIN HOME	163	237	74	45%	\$317,016
MALCOLM GROW- ANDREWS	2979	3113	134	5%	\$484,946
97TH MED GRP-ALTUS	391	516	125	32%	\$527,625
47TH MED SQUAD- LAUGHLIN	404	428	24	6%	\$103,536
WILFORD HALL- LACKLAND	2116	2148	32	1%	\$136,736
AIR FORCE TOTAL	6053	6442	389		\$1,569,859
NAVY					
NH OAKLAND	1102	1342	240	22%	\$1,064,880
NH PENSACOLA	643	703	60	9%	\$208,920
NNMC BETHESDA	2355	2705	350	15%	\$1,680,700
NH CHERRY POINT	570	590	20	4%	\$82,240
NAVY TOTAL	4670	5340	670		\$3,036,740
SERVICES TOTAL	16,695	18,749	2054		\$8,525,414

**Table 10. MTFs Exceeding FY95 Receivable Baselines. * Using MTF's
ASA. After [Ref. 31]**

MEDICAL TREATMENT FACILITY	PAYABLE BASELINE	PAYABLE ACTUAL	DIFF.	% DIFF.	TRANSFER RECEIPT*
ARMY					
FOX ACH-REDSTONE ARSENAL	174	204	30	17%	\$96,660
NOBLE ACH- MCCLELLAN	359	377	18	5%	\$60,588
EVANS ACH-FT. CARSON	722	743	21	3%	\$72,891
MARTIN ACH-FT. BENNING	353	464	111	31%	\$358,974
TRIPLER AMC-FT. SHAFTER	1979	2362	383	19%	\$1,844,145
MUNSON ACH-FT. LEAVENWORTH	126	130	4	3%	\$12,812
IRELAND ACH-FT. KNOX	463	675	212	46%	\$876,196
BAYNE-JONES ACH- FT. POLK	347	523	176	51%	\$729,168
MONCRIEF ACH-FT. JACKSON	971	1654	683	70%	\$2,352,935
WILLIAM BEAUMONT- FT. BLISS	2263	2445	182	8%	\$755,118
BROOKE AMC-FT. SAM HOUSTON	9725	10139	414	4%	\$1,759,086
ARMY TOTAL	17,482	19,716	2,234		\$8,918,573
AIR FORCE					
325TH MED GRP- TYNDALL	101	143	42	42%	\$148,428
56TH MED GRP- MACDILL	442	478	36	8%	\$116,712
MALCOLM GROW- ANDREWS	3182	3266	84	3%	\$303,996
5544TH MED GROUP- NELLIS	119	284	165	138%	\$586,740

Table 11. MTFs Exceeding FY95 Payable Baselines. *Using MTF's ASA Price. After [Ref. 31]

MEDICAL TREATMENT FACILITY	PAYABLE BASELINE	PAYABLE ACTUAL	DIFF.	% DIFF.	TRANSFER RECEIPT*
49TH MED GRP- HOLLOMAN	62	81	19	30%	\$81,396
4TH MED GRP- SEYMOUR JOHNSON	63	85	22	35%	\$93,368
5TH MED GRP-MINOT	309	338	29	9%	\$121,365
47TH MED SQUAD- LAUGHLIN	30	31	1	5%	\$4,314
649TH MED GRP-HILL	156	329	173	111%	\$561,039
1ST MED GRP- LANGLEY	958	1338	380	40%	\$1,228,540
AIR FORCE TOTAL	5,422	6,373	951		\$3,245,898
NAVY					
NH TWENTYNINE PALMS	85	99	14	16%	\$47,432
NH CHERRY POINT	34	38	4	11%	\$16,448
NH OAK HARBOR	37	57	20	55%	\$68,700
NAVY TOTAL	156	194	38		\$132,580
SERVICES TOTAL	23,060	26,283	3,223		\$12,297,051

Table 11. (Continued)

VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A. SUMMARY

This research examined and evaluated the transfer payment policy, a new concept in the MHSS and specifically unique to the military medical setting. It was published as policy by Health Affairs in FY95 and was the result of a significant effort by the Transfer Payment Committee, which was composed of representatives from Health Affairs and the Services.

This policy was originally promulgated to control possible "cost shifting" behavior by MTFs operating under DoD's modified capitation resource allocation system. Additionally, it provided a mechanism to "equitably" transfer funds between the Services and MTFs. The research, itself, was designed to determine the possible effects that the transfer payment policy would have upon MTF referral practices and resources. To answer this question, four subsidiary research questions were addressed:

- What concerns necessitated the need for a transfer payment policy?
- What information systems and data were utilized in determining the transfer payment price?
- How and when is the transfer payment price determined?
- What are the primary implementation issues of the individual Services, Lead Agents, and MTFs?

To answer these questions, Chapter II first provided an overview of the MHSS direct care system, TRICARE, DoD's modified capitation resource allocation

system, and the information systems currently utilized in the MHSS. Next, Chapter III defined and examined the factors used in determining and computing a transfer payment. Then, in Chapter IV, the "triggering" mechanisms of the policy were studied through the use of illustrations to observe when a transfer payment would be initiated and how the actual amount of funds to transfer were computed. Lastly, the current implementation issues of the Services and lead agents were presented and discussed in Chapter V.

B. CONCLUSIONS

The findings of this research reveal that DoD's modified capitation resource allocation system could incentivize cost shifting behavior and that the transfer payment methodology, if not properly managed, could strengthen this incentive.

Although the transfer payment policy was not designed to be a revenue producing mechanism, it could be perceived as an opportunity to increase an MTF's allocated funding. If given the opportunity, MTFs will naturally compete for the limited resources available within the MHSS.

Although the policy, as mentioned previously, was not fully implemented in FY95, one could ascertain from this research that the establishment of receivable and payable baselines would instill certain economic behaviors within MTFs.

Exceeding a receivable baseline would mean that a referring MTF would have to "pay" actual funds to a referral MTF for those additional services. Consequently, the incentive would be to stay well below the receivable baseline. As noted in Table 9 of Chapter V, of the 104 MTFs in the MHSS direct care system,

14% of the MTFs exceeded their receivable baselines. The total amount of funds that would have transferred (using the MTF's ASA price) equaled \$8,525,414, which is roughly only 2 percent of the estimated \$450 million spent on direct inpatient care for referrals. If the transfer payment policy is ever fully implemented (no funds were actually transferred in FY95), the number of MTFs exceeding their receivable baselines could be expected to decline.

Conversely, if actual funds would be received, referral MTFs that have already exceeded their payable baselines, could increase their allocated funding by accepting as many referrals from referring MTFs as possible. In FY95, 23% of the 104 MTFs exceeded their payable baselines. The amount in total receipts totaled \$12,297,051, roughly 3% of the \$450 million spent on referral inpatient care. This is a relatively small percentage of the total amount spent on inpatient care, but with the added incentive (transfer payment policy implementation) of actually receiving additional funds, the number of MTFs exceeding their payable baselines could be expected to grow.

Table 12 presents a summary of Tables 10 and 11. It shows the amount of funds (\$12.2 Million) that would have transferred in FY95 between MTFs or Services due to exceeded receivable (transfers out) and payable (transfers in) baselines. Recall from Chapter V that specific MTF ASA prices from Appendix A were used in calculating transfer payments. Note in Table 12 that the Army totals comprise roughly 46 percent and 73 percent of the total potential transfers for

exceeding the 1995 receivable and payable baselines, respectively. Relative to the total DHP budget, the potential transfer payments are insignificant.

SERVICE	FY95 RECEIVABLE BASELINE (Transfers Out)	FY95 PAYABLE BASELINE (Transfers In)
U.S. Army	\$3.9 Million	\$8.9 Million
U.S. Navy	\$3.0 Million	\$0.1 Million
U.S. Air Force	\$1.6 Million	\$3.2 Million
TOTAL	\$8.5 Million	\$12.2 Million

Table 12. Summary of Transfer Payments for FY95

The information systems currently utilized are inadequate to support the data requirements of the transfer payment policy as written. The data needs to be accurate, timely, and readily accessible. Future systems, such as CEIS and ADS, could easily accommodate the transfer payment concept on an inpatient as well as outpatient basis.

The administrative procedures in the policy should be clarified and standardized across all Services, Health Service Regions (HSRs), and MTFs. For instance, when should the actual transfer of funds occur (i.e., end of the year, quarterly, monthly) and what mechanism will be used to document billings (UB-92?). Additionally, what role will the lead agents have in the transfer payment policy? Lead agents are the crucial link within the HSRs in the coordination of health care services. They should be intimately involved in the policy to ensure referral patterns are in concert with the region's long-term health care services plan.

There are several implementation issues related to the transfer payment policy, but none of them can't be overcome by slight adjustments in the current policy. One exception may be the participation of the Managed Care Support (MCS) contractor. This thesis cannot determine the effects of such participation, mainly because the policy itself has not been fully implemented, however this particular issue should be fully addressed prior to a decision to implement all facets of the transfer payment policy.

C. RECOMMENDATIONS

Based on the findings and conclusions of this research, it appears that the transfer payment policy is following a natural course of evolution. All new policies initially come under some scrutiny, until certain adjustments are made, then they are accepted as a natural fact of everyday life. Indeed, the policy itself, as written, has provoked some debate within the military medical establishment, but after review of FY95 actual data, this debate may have been for naught.

Subsequently, the recommendation of this thesis is to refine the procedures, improve the information systems, and if desired, apply these techniques at some future date when it is perhaps more feasible. In any case, given the Services' spirit of mutual cooperation in resolving this issue, it may prove to be prudent just to leave the policy in place as a "background" control system.

D. AREAS FOR FURTHER RESEARCH

The focus of this research was to examine and evaluate the transfer payment policy. This research uncovered several areas that impacted upon the transfer

payment methodology, but due to the limitations of this study, those areas were not investigated. The items below warrant further research:

- Conduct a statistical analysis of the accuracy and timeliness of data submitted and stored within RCMAS or MEPRS.
- Conduct a study on an MTF's marginal cost of doing business as compared to its calculated adjusted standardized amount (ASA) and similar private-sector medical facilities.
- Examine the decision making process for resource allocation as it relates to the Services' medical departments and lead agents.
- Examine and evaluate the incentives associated with the Managed Care Support contractor and determine what adjustments could be made to the contract to mutually benefit the government and contractor.
- Study the differences between the Services and MTFs in potential transfers as seen in Tables 10, 11, and 12.

APPENDIX A. APPROVED FY95 BASELINES AND MTF ASA PRICE

This Appendix provides the FY95 baselines for individual Military Treatment Facilities (MTF) and their Adjusted Standardized Amounts (ASA).

U.S ARMY MEDICAL TREATMENT FACILITY	FY95 RWP RECEIVABLE BASELINE	FY95 RWP PAYABLE BASELINE	FY95 ASA PRICE PER RWP
FOX ACH-REDSTONE ARSENAL	339.80	173.45	\$3,222.00
NOBLE ACH-FT MCCLELLAN	416.58	358.88	\$3,366.00
LYSTER ACH-FT RUCKER	568.92	227.08	\$3,222.00
BASSETT ACH-FT WAINWRIGHT	321.39	145.73	\$4,374.00
BLISS ACH-FT HUACHUCA	347.05	127.99	\$4,120.00
FITZSIMONS AMC-DENVER	316.79	5948.85	\$4,110.00
EVANS ACH-FT CARSON	3049.53	721.54	\$3,471.00
WALTER REED AMC-WASH DC	1582.69	19365.87	\$4,500.00
EISENHOWER AMC-FT GORDON	220.09	6715.70	\$4,051.00
MARTIN ACH-FT BENNING	1066.56	353.10	\$3,234.00
WINN ACH-FT STEWART	1192.57	304.26	\$3,416.00
TRIPLER AMC-FT SHAFTER	250.53	1979.50	\$4,815.00
IRWIN ACH-FT RILEY	797.58	228.68	\$3,839.00
MUNSON ACH-FT LEAVENWORTH	449.02	126.06	\$3,203.00
BLANCHFIELD ACH-FT CAMBELL	784.78	585.64	\$3,124.00
IRELAND ACH-FT KNOX	455.80	463.13	\$4,133.00
BAYNE-JONES ACH-FT POLK	528.54	346.59	\$4,143.00
KIMBROUGH ACH-FT MEADE	6261.11	1236.00	\$3,255.00
L. WOOD ACH-FT LEONARD WOOD	632.25	1169.43	\$3,922.00
PATTERSON ACH-FT MONMOUTH	558.81	254.27	\$3,566.00
KELLER ACH-WEST POINT	529.47	454.98	\$3,644.00
WOMACK AMC-FT BRAGG	1800.13	1238.53	\$3,371.00
REYNOLDS ACH-FT SILL	933.15	224.62	\$3,395.00
MONCRIEF ACH-FT JACKSON	835.98	970.61	\$3,445.00
WILLIAM BEAUMONT AMC-FT BLISS	350.94	2263.46	\$4,149.00
BROOKE AMC-FT SAM HOUSTON	5926.48	9725.41	\$4,249.00
DARNALL ACH-FT HOOD	3859.97	516.16	\$3,580.00
MCDONALD ACH-FT EUSTIS	1795.42	687.76	\$3,052.00
KENNER ACH-FT LEE	718.78	789.04	\$3,437.00
DEWITT ACH-FT BELVOIR	9537.64	765.15	\$3,339.00
MADIGAN AMC-FT LEWIS	483.04	5045.09	\$5,207.00
WEED ACH-FT IRWIN	365.45	247.11	\$4,310.00
U.S. ARMY TOTAL	47276.84	63759.67	

U.S AIR FORCE MEDICAL TREATMENT FACILITY	FY95 RWP RECEIVABLE BASELINE	FY95 RWP PAYABLE BASELINE	FY95 ASA PRICE PER RWP
502ND MED GRP-MAXWELL	352.30	212.64	\$3,521.00
3RD MED CTR-ELMENDORF	317.30	485.69	\$3,575.00
58TH MED GRP-LUKE	750.30	337.28	\$3,256.00
355TH MED GRP-DAVIS MONTHAN	305.14	151.40	\$3,551.00
314TH MED GRP-LITTLE ROCK	314.70	184.99	\$3,401.00
DAVID GRANT MED CTR-TRAVIS	613.94	5860.67	\$4,969.00
9TH MED GRP-BEALE	603.55	59.95	\$3,564.00
93RD MED GRP-CASTLE	354.73	15.03	\$3,556.00
30TH MED GRP-VANDENBERG	189.39	121.55	\$3,657.00
650TH MED GRP-EDWARDS	524.98	67.44	\$3,634.00
22ND MED GRP-MARCH	943.25	1008.74	\$3,413.00
USAF ACADEMY HOSP	1376.33	1102.75	\$3,549.00
436TH MED GRP-DOVER	981.26	101.00	\$3,541.00
646TH MED GRP-EGLIN	998.51	633.78	\$3,522.00
325TH MED GRP-TYNDALL	532.03	100.59	\$3,534.00
56TH MED GRP-MACDILL	592.05	441.62	\$3,242.00
45TH MED GRP-PATRICK	577.03	102.01	\$3,496.00
347TH MED GRP-MOODY	429.39	67.58	\$4,219.00
653RD MED GRP-ROBINS	497.89	61.45	\$3,553.00
366TH MED GRP-MOUNTAIN HOME	163.19	302.68	\$4,284.00
USAF MED CTR-SCOTT	412.54	1324.72	\$3,236.00
2ND MED GRP-BARKSDALE	248.91	281.62	\$3,541.00
MALCOM GROW MCTR-ANDREWS	2978.52	3182.19	\$3,619.00
410TH MED GRP-K.I. SAWYER	113.91	38.64	\$4,267.00
KEESLER MEDICAL CENTER	480.14	5029.20	\$4,424.00
14TH MED SQUAD-COLUMBUS	151.35	116.88	\$4,231.00
351ST MED GRP-WHITEMAN	283.01	129.01	\$4,203.00
EHRLING BERQUIST HOSP-OFFUTT	253.80	420.84	\$3,548.00
554TH MED GRP-NELLIS	409.11	119.46	\$3,556.00
542ND MED GRP-KIRTLAND	177.20	227.95	\$3,554.00
49TH MED GRP-HOLLOMAN	1192.03	61.89	\$4,284.00
27TH MED GRP-CANNON	351.52	29.80	\$4,292.00
416TH MED GRP-GRIFFIS	72.01	30.73	\$3,551.00
4TH MED GRP-SEYMOUR JOHNSON	419.26	63.42	\$4,244.00
319TH MED GRP-GRAND FORKS	295.88	57.13	\$3,497.00
5TH MED GRP-MINOT	205.13	309.03	\$4,185.00
USAF MCTR WRIGHT-PATTERSON	264.84	3334.20	\$4,648.00
(U.S. Air Force continued on next page).			

U.S AIR FORCE MEDICAL TREATMENT FACILITY	FY95 RWP RECEIVABLE BASELINE	FY95 RWP PAYABLE BASELINE	FY95 ASA PRICE PER RWP
654TH MED GRP-TINKER	490.14	229.36	\$3,514.00
97TH MED GRP-ALTUS	391.32	29.22	\$4,221.00
363RD MED GRP-SHAW	678.95	186.91	\$3,593.00
28TH MED GRP-ELLSWORTH	287.81	84.11	\$3,515.00
96TH MED GRP-DYESS	523.57	43.37	\$3,535.00
396TH MED GRP-SHEPPARD	684.22	1494.18	\$3,518.00
47TH MED SQUAD-LAUGHLIN	404.28	29.88	\$4,314.00
WILFORD HALL MCTR-LACKLAND	2116.04	19551.29	\$4,273.00
649TH MED GRP-HILL	211.61	155.74	\$3,243.00
1ST MED GRP-LANGLEY	1843.25	957.83	\$3,233.00
92ND MED GRP-FAIRCHILD	218.73	375.46	\$3,560.00
90TH MED GRP-F.E. WARREN	489.81	96.24	\$3,530.00
652ND MED GRP-MCCLELLAN	1786.78	211.29	\$3,281.00
U.S. AIR FORCE TOTAL	29852.93	49620.43	

U.S NAVY MEDICAL TREATMENT FACILITY	FY95 RWP RECEIVABLE BASELINE	FY95 RWP PAYABLE BASELINE	FY95 ASA PRICE PER RWP
NH CAMP PENDLETON	2954.33	2315.31	\$3,338.00
NH OAKLAND	1102.00	3651.27	\$4,437.00
NH LEMOORE	543.47	40.72	\$4,264.00
NH SAN DIEGO	417.99	5838.25	\$5,183.00
NH TWENTYNINE PALMS	531.09	84.73	\$3,388.00
NH GROTON	266.45	390.55	\$3,575.00
NH PENSACOLA	642.87	686.68	\$3,482.00
NH JACKSONVILLE	456.76	865.14	\$3,493.00
NH ORLANDO	454.59	886.05	\$3,239.00
NH GREAT LAKES	378.37	1528.06	\$3,272.00
NNMC BETHESDA	2355.21	11443.52	\$4,802.00
NH PATUXENT RIVER	1066.28	81.65	\$4,111.00
NH CAMP LEJEUNE	700.02	992.70	\$3,317.00
NH CHERRY POINT	569.74	34.07	\$4,112.00
NH NEWPORT	230.58	211.68	\$3,595.00
NH CHARLESTON	311.46	490.60	\$3,490.00
NH BEAUFORT	546.76	126.17	\$4,182.00
NH MILLINGTON	213.10	279.44	\$3,218.00
NH CORPUS CHRISTI	802.90	382.57	\$3,534.00
NH PORTSMOUTH	1156.38	6028.03	\$4,382.00
NH BREMERTON	1470.88	753.70	\$3,530.00
NH OAK HARBOR	595.58	36.87	\$3,435.00
U.S. NAVY TOTAL	17766.81	37147.76	

Patient Origin and RWP Summary

REPORT CRITERIA

REPORT TYPE:

RWP Summary

DATA SOURCES: FY1994 (Including Outliers)

Direct Care

SELECTION CRITERIA 1:

Health Care Institution 0124

	CATCHMENT	NONCATCHMENT	OTHER CATCHMENT	TOTAL RWP
MTF	15403.03	2107.97	3931.29	21442.29
CHAMPUS	8019.62			
Other MTFs	1158.63			
CATI,II&IV TOTAL RWP	24581.61			

APPENDIX B. Patient Origin and RWP Summary Report.

This report is produced for individual MTF's by the Retrospective Case Mix Analysis System (RCMAS) and may be used to monitor an MTF's receivable and payable baselines.

LIST OF REFERENCES

1. Government Accounting Office, Report to Congressional Requesters, Defense Health Care, "Issues and Challenges Confronting Military Medicine", 22 March 1995.
2. Assistant Secretary of Defense for Health Affairs, Memorandum, "Transfer Payment Policy", 22 May 1995.
3. Assistant Secretary of Defense for Health Affairs, Memorandum, "Preparing the Military Health Services System (MHSS) for Capitation-based Resource Allocation", 23 July 1993.
4. Assistant Secretary of Defense for Health Affairs, Information Papers to the New Members of the 104th Congress, "The Military Health Services System", 1 March 1995.
5. U.S. Department of Defense, Office of Program Analysis and Evaluation, Executive Report of the Comprehensive Study of the Military Medical Care System, "The Economics of Sizing the Military Medical Establishment", 24 March 1994.
6. Lamar, S.R., "DoD Health Care Reform: TRICARE, A Basic Program Overview, May 1994.
7. Frederick, P.L., Brief for the 1996 TRICARE Conference, "Capitation Budgeting in the Defense Health Program, 24 January 1996.
8. Government Accounting Office, Testimony Before the Subcommittee on Military Personnel, Committee on National Security, House of Representatives, Defense Health Care, "DoD's Managed Care Program Continues to Face Challenges", 28 March 1995.
9. Assistant Secretary of Defense for Health Affairs, Memorandum, "Definitions Related to TRICARE Enrollment", 14 March 1995.
10. Department of Defense, Department of the Navy, Medical Expense and Performance Reporting System, "MEPRS Training", undated.
11. Defense Medical Systems Support Center, Central Retrospective Case-Mix Analysis System for an Open System Environment, "Users Manual", 1 October 1993.

12. Department of Defense, Automated Information System (AIS) Fact Sheet, "Ambulatory Data System (ADS)", 7 February 1996.
13. Department of Defense, Automated Information System (AIS) Fact Sheet, "Corporate Executive Information Systems (CEIS)", 13 March 1996.
14. Gapenski, L.C., "Understanding Health Care Financial Management", AUPHA Press/Health Administration Press, 1993.
15. Federal Register, Volume 60, Number 191, "Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); FY96 DRG Updates", 3 October 1995.
16. Department of the Air Force, Office of the Surgeon General, Brief, "Adjusted Standardized Amounts (ASAs), undated.
17. Assistant Secretary of Defense for Health Affairs, Report on FY95 Reimbursement Rates, "Adjusted Standardized Amounts (ASAs) Per RWP", 1995.
18. Assistant Secretary of Defense for Health Affairs, Brief on the Transfer Payment Policy, 24 January 1996.
19. Assistant Secretary of Defense for Health Affairs, Director, Capitation Budgeting, Memo, "Changes in Inpatient Workload between FY92 and FY93", 19 August 1994.
20. Interview with Resource Management personnel, Bureau of Medicine and Surgery (BUMED), Washington D.C., 28 February 1996.
21. Interview with RCMAS Analysts, Defense Medical Systems Support Center, Falls Church, VA, 1 June 1996.
22. Headquarters, United States Air Force, Office of the Surgeon General, "Transfer Payment Questions", undated.
23. Interview with Maj D. Smith, U.S. Army Medical Command (USMEDCOM), January 1996.
24. Defense Medical Systems Support Center, Resource Analysis and Planning System (RAPS), "Users Manual", 9 January 1995.

25. Department of the Army, Office of the Surgeon General, Memorandum, "Transfer of Payment Policy", 3 August 1995.
26. Department of Defense, TRICARE Health Services Region 3, Memorandum, "Transfer Payment Policy", 29 June 1995.
27. Bureau of Medicine and Surgery, Paper, "The Role of the Military Health Services System in National Health Reform", undated.
28. Interview with CDR T. Ebert, Assistant Secretary of Defense for Health Affairs, Capitation Budgeting, Falls Church, VA, 26 February 1996.
29. Bureau of Medicine and Surgery, Resource Management, Brief, "Fiscal Realities: Administrative Challenges and Capitation", undated.
30. Interview with LT COL R. Rognenhaugh, Assistant Secretary of Defense for Health Affairs, Capitation Budgeting, Falls Church, VA, 23 May 1996.
31. Assistant Secretary of Defense for Health Affairs, Capitation Budgeting, Brief, "Transfer Payments", 28 May 1996.
32. Headquarters, United States Air Force, Office of the Surgeon General, "Draft on Transfer Payment Policy", 23 January 1995.

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